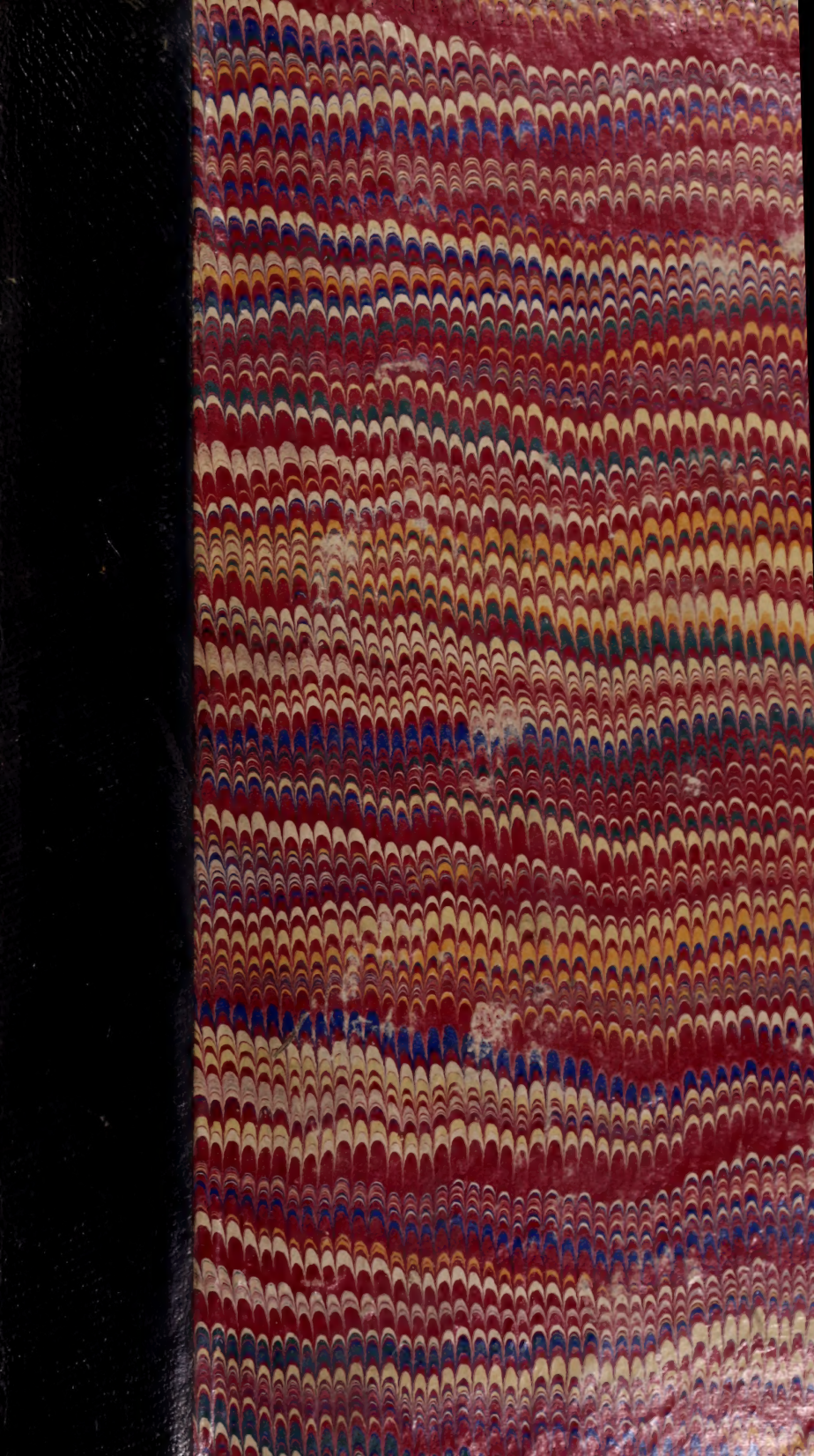

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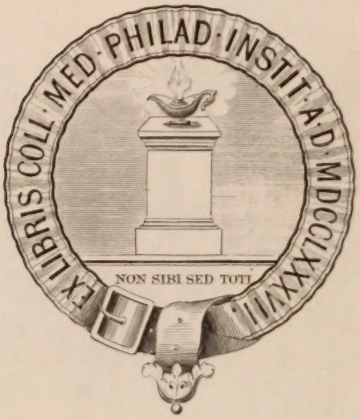
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COLLEGE OF PHYSICIANS OF PHILADELPHIA

VIRGINIA

MEDICAL MONTHLY,

(RICHMOND.)

VOLUME IV.

From April, 1877, to March, 1878, inclusive.

CONTAINING IN ADDITION THE

Transactions of the Eighth Annual Session of the Medical Society of Virginia.

LANDON B. EDWARDS, M. D.,
EDITOR AND PROPRIETOR.

1878:
J. W. FERGUSSON & SON, Steam Printers,
Richmond.

ADVERTISEMENT.

In commencing this fourth annual volume, we promised our subscribers only 960 pages; we now present them with 1150 pages—including the *Transactions of Eighth Annual Session of the Medical Society of Virginia.* We promised a steel-plate engraving of Horace Wells and that eminent Southern surgeon, Dr. Hunter McGuire. In addition, we have furnished accurate steel-plate engravings with biographical sketches of Dr. Crawford W. Long, of Athens, Ga., the *Discoverer of Anæsthesia*, and the world-famed surgeon, Dr. Lewis A. Sayre, of New York City.

Our promises for the fifth year are no more in substance than they were for the fourth; but if we can find opportunity to improve on these promises, we shall gladly do so.

Our April number will contain a steel-plate engraving and biographical sketch of the renowned Dr. Robert Battey, of Rome, Ga., whose practical suggestion and daring operation have resulted in one of the most brilliant achievements in medicine during the present century.

VIRGINIA
MEDICAL MONTHLY.

VOLUME IV—No. 1. WHOLE NUMBER 37.

RICHMOND, 1877.

Original Communications.

ART. I.—*The First Medical Fee-bill in Virginia—Comparative Compensation of the Medical Profession One Hundred and Forty Years Ago and at the Present Time.* By L. S. JOYNES, M. D., Emeritus Professor of Physiology in Medical College of Virginia; Secretary of the Virginia State Board of Health, etc., Richmond, Va. (Read before the Richmond Academy of Medicine, December 19, 1876.)

I presume it would not be uninteresting to members of the Academy to learn something about medical fees in Virginia in colonial times, and how the compensation of our great-grandfathers in the profession compared with that which we claim today. I therefore submit a fee-bill established by law in the year 1736—one year before the town of Richmond was laid off by Colonel Byrd, several years before the building of St. John's church, and forty years before the Declaration of Independence. I was first informed of the existence of this fee-bill by a notice in a medical journal of a *brochure* by Dr. J. M. Toner, of Washington, entitled "*Contributions to the Annals of Medical Progress and Medical Education in the United States, before and during the War of Independence*," published in 1874. As I did not possess and had not seen a copy of this publication,* I sought and found the legislative act containing the fee-bill in that precious repository of the old laws of Virginia, *Hening's*

*Since this was written, I have had the pleasure of reading not only this, but Dr. Toner's later publication on "The Medical Men of the Revolution," and cannot too strongly express my appreciation of the industry and professional zeal with which this distinguished gentleman has devoted himself to the investigation of the early medical history of our country.

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Statutes at Large (vol iv, p. 509). The act was passed in August, 1736 (the 10th year of the reign of George II), and is as follows:

"An Act for Regulating the Fees and Accounts of the Practicers in Phisic.

"I. Whereas, The practice of phisic in this colony, is most commonly taken up and followed, by surgeons, apothecaries, or such as have only served apprenticeships in these trades, who often prove very unskilful in the art of a phisician; and yet do demand excessive fees, and exact unreasonable prices for the medicines which they administer, and do too often, for the sake of making up long and expensive bills, load their patients with greater quantities thereof than are necessary or useful, concealing all their compositions, as well to prevent the discovery of their practice, as of the true value of what they administer: which is become a grievance, dangerous and intolerable, as well to the poorer sort of people as others, and doth require the most effectual remedy that the nature of the thing will admit:

"II. *Be it therefore enacted, by the Lieutenant-Governor, Council, and Burgesses, of this present General Assembly, and it is hereby enacted, by the authority of the same,* That from and after the passing of this act, no practicer in phisic, in any action or suit whatever, hereafter to be commenced in any court of record in this colony, shall recover, for visiting any sick person, more than the rates hereafter mentioned, that is to say,

Surgeons and apothecaries, who have served an apprenticeship to those trades, shall be allowed,

	l.	*s.*	*d.*
For every visit, and prescription, in town, or within five miles	00	5	00
For every mile, above five, and under ten	00	1	00
For a visit, of ten miles	00	10	00
And for every mile above ten	00	00	06

With an allowance for all ferriages in their journeys.

	l.	*s.*	*d.*
To surgeons, For a simple fracture, and the cure thereof	02	00	00
For a compound fracture, and the cure thereof	04	00	00

But those persons who have studied phisic in any university, and taken any degree therein, shall be allowed

	l.	*s.*	*d.*
For every visit, and prescription, in any town, or within five miles	00	10	00
If above five miles, for every mile more, under ten	00	1	00
For a visit, if not above ten miles	1	00	00
And for every mile, above ten	00	1	00

With an allowance of ferriages, as before.

"III. And to the end the true value of the medicines administred by any practicer in phisic, may be better known, and judged of, *Be it further enacted, by the authority aforesaid*, That whenever any pills, bolus, portion, draught, electuary, decoction, or any medicines, in any form whatsoever, shall be administred to any sick person, the person administring the same shall, at the same time, deliver in his bill, expressing every particular thing made up therein; or if the medicine administred, be a simple, or compound, directed in the *dispensatories*, the true name thereof shall be expressed in the same bill, together with the quantities and prices, in both cases. And in failure thereof, such practicer, or any apothecary, making up the prescription of another, shall be nonsuited, in any action or suit hereafter commenced, which shall be grounded upon such bill or bills: Nor shall any book, or account, of any practicer in phisic, or any apothecary, be permitted to be given in evidence, before a court, unless the articles therein contained, be charged according to the directions of this act.

"IV. *And be it further enacted by the authority aforesaid*, That this act shall continue and be in force, for and during two years, next after the passing thereof, and from thence to the end of the next session of assembly."

The preamble to the foregoing act presents several points worthy of special note, viz.: that the great body of medical practitioners in Virginia at that date were imperfectly qualified men, without a regular medical education, or medical degree: that surgeons were evidently rated lower in professional rank than physicians, the former being still, in the mother country, associated with the barbers in one company—an association which was not severed till nine years later (1745): that the apothecaries, in Virginia as in England, boldly entered the field of practice in competition with the physicians, instead of confining themselves to the humbler duty of compounding prescriptions for the latter; that it was customary in those days (as it continued to be long after) for both surgeons and apothecaries to be regularly *apprenticed* to those callings (or "trades," as they are significantly styled in the act); that polypharmacy, or excessive drugging, and the use of secret remedies, attained the extent of public evils, requiring suppression by legal enactment; and finally, that doctors' bills were quite as much complained of then as now (perhaps with more justice).

The act recognizes, in the most emphatic manner, the supe-

rior claims of the regularly educated medical man, bearing a University degree, by according to him a double fee for a visit and prescription in town or within five miles, and double mileage when the distance exceeded ten miles. From Mr. Jeaffreson's interesting "*Book about Doctors*," I learn that in England also, in the early part of the last century, ten shillings was the customary physician's fee, while the surgeon was allowed a shilling a mile, "be his journey far or near," besides specific fees for particular kinds of service.

But how do the rates of 1736 compare with those of 1876 as to the actual compensation afforded—their adequacy to supply the physician with the necessaries and comforts of life—in other words, their *purchasing power?* In connection with this question, it is interesting to note that in the same year that the fee-bill was established, the pay of members of the House of Burgesses was fixed by law at 10 shillings *per diem*; so that the town doctor got for his visit and prescription the same pay as the burgess for his day's service; whereas, during most of the time since the civil war, the *per diem* of members of the General Assembly has been $6, or *three times* our present fee for a visit; and even before the war, for many years, it was $4. As compared with the law-makers, therefore, the change of times and circumstances has been greatly to the disadvantage of the doctors.

It must be explained that 10 shillings in colonial money were not equal to 10 English shillings, or shillings sterling. I find that an act passed in 1727 provided that the English crown piece (5 shillings) should pass in Virginia for 6*s.* 3*d.* According to this ratio, 10 shillings in Virginia currency were exactly equal to 8 shillings sterling. Now, 8 shillings sterling are equal to $1.94 (gold) of American money, or about $2.05 in greenbacks. Our colonial predecessors of Governor Gooch's time, therefore, got actually *more money* for their visits than we do—unless the visits were out of town; then, the mileage, at the rate of a shilling a mile, made but a sorry addition to their fee.

As to the purchasing power of the 10 shilling fee in 1737, compared with that of the $2 fee in 1876, there is one important commodity with regard to which we are not left in any doubt. This is *tobacco*, which, at the time spoken of, even more than in

these latter years, was the great staple of the colony. It was not only an article of merchandize, but a medium of exchange; if not actually *money*, it was the basis of a currency. Taxes and church rates were levied in tobacco; fines were imposed in tobacco; and nearly all fees of public officers were appointed in tobacco. From several acts passed about the date of the fee-bill, it is clear that one shilling in currency was equivalent to 10 pounds of tobacco; so that the doctor's fee of 10 shillings was worth 100 pounds of that valuable commodity. At the present time, how refreshing it would be to the hard-worked practitioner to receive 100 pounds of tobacco per visit! Such a fee would be better than the sovereign which the London physician pockets, or even the guinea of former times; for the 100 pounds of tobacco now—the fair, merchantable article, such as is bought for shipping, to say nothing of the finer grades—are worth from $8 to $9—sometimes more, sometimes less.

As it respects other commodities, while a complete list of the prices current at the period in question could now hardly be obtained, our information with regard to them is sufficient to show that numerous articles of necessity were then purchasable for much less money than at present. Mr. R. A. Brock, who is so well known as a devoted student of the history and antiquities of Virginia, has kindly furnished me with many items from the accounts, running from 1726 to 1732, of a reverend gentleman who combined the professions of parson and merchant in the county of Essex. Among these items, I find corn set down at from 6*s*. 6*d*. to 8*s*.—say $1.30 to $1.60—per barrel; oats, 1 to 2*s*. per bushel; pork from 1*d*. per pound to 14*s*. per cwt.; butter, 6*d*. per pound; 2 cows and 2 calves, 3*l*. 10*s*. (about $14); 2 head young cattle, 2*l*.; sheep, about 6*s*.; 10 barrows (hogs), 6*s*. each, etc. The prices of home products in general were naturally kept down by the absence of large towns to serve as markets, and create an active demand for what the colony could so abundantly produce; and money had not yet begun to suffer that heavy decline in its value which has taken place since California, Australia and New Zealand have flooded the world with their gold. Land, too, was cheap, as well as lumber, and the wages of labor; so that the medical man could secure a dwelling at a comparatively small cost.

Some articles, no doubt, especially of foreign growth and manufacture, and particularly of the class of luxuries, were dearer than at present; but these constituted a much smaller proportion of the annual expenses than the more necessary domestic articles before referred to. It should be recollected, too, that articles of English manufacture paid no duty in the colony, and were nearly as cheap here as in England; while the style of living was in general much plainer than at present, except among the wealthier planters.

On the whole, there can be little doubt that the 10-shilling fee of old times went a good deal farther towards the support of a family than the $2 fee in these days of extravagance and high duties on imports. So much can hardly be said with reference to the fees allowed to surgeons. A sum equal to about $8 of our money "for a simple fracture and the cure thereof," and twice that amount "for a compound fracture and the cure thereof," would hardly be considered "living wages" now-a-days. It must be admitted, too, that the great majority of thos who got the better fees had to work very hard for their money *Town doctors* were few in number, because there were few towns worthy of the name. Richmond and Petersburg, and the towns situated higher up the country, had as yet no existence, and Norfolk seems to have been at that time the only place of considerable population and trade. The others, including Williamsburg, the capital, and Jamestown, the former capital, were mere villages, and it was mainly by country practice that their physicians earned a livelihood.

In my search through the old Statutes, I encountered one act of liberality (or rather justice) to the medical profession, which entitles the early colonial legislators to especial praise—and the more so, as exceptional favors to our fraternity are quite unheard of in the present age. As far back as 1660–61 (13th Charles II), an act was passed providing that, although existing laws forbade the recovery of accounts from the estate of a deceased person, those of physicians and surgeons should, in future, be excepted, and should be legally recoverable for attendance during an illness which resulted fatally. In case the patient recovered, his medical attendant might avail himself of the aid of the law for six months after recovery, but no longer—a

very stringent statute of limitations this, but one which no doubt had the salutary effect of discouraging long credits on doctors' bills.

On the other hand, the doctors of the colony were, from a very early period, subjected to legal censure and restraint in the matter of excessive charges. As far back as 1639, an act was passed with reference to this subject, which was re-enacted with an amendment in 1645–46, and again appears, with modifications, in 1657–58, and in 1661–62. In this last form, the preamble makes the damaging recital that "the excessive and immoderate prices exacted by diverse avaritious and gripeing practitioners in phisick and chirurgery hath caused several hard-hearted masters swayed by profitable rather than charitable respects, rather to expose a sick servant to a hazard of recovery, than put themselves to the certaine charge of a rigorous though unskilfull phisician, whose demands for the most part exceed the purchase of the patient, many other poore people also being forced to give themselves over to a lingering disease rather than ruine themselves by endeavouring to procure an uncertaine remedy:" and for the redress of these grievances, the act allows any person "conceiving the accompt of the phisitian or chirurgion unreasonable to arrest the said phisician or chirurgion to the generall or county court where the said phisitian or chirurgion shall declare upon his oath the true value, cost, and quantity of the drugs administred, for which the court shall grant order against the plaintiff with fifty per cent advance, and such consideration for his care, visitts and attendance as they shall judge he hath deserved, and if it shall appeare by evidence that the said phisitian or chirurgion hath neglected his patient while he was under cure, the court shall censure him to pay soe much as they in their discretion shall think reasonable." It was not until 1692 that this harsh act was repealed, as "being in itselfe unreasonable;" and then the physician was allowed "*cent per cent* upon the first cost" of his "drugs and means."

How long the legal fee-bill of 1736 continued to rule in the colony, I am unable to say. Though limited by the terms of the act to little more than two years, it is probable that it continued to be generally observed for a much longer period; for

in following the legislation of the colony down to the beginning of the Revolutionary War, I find no further allusion to the subject.

ART. II.—*A Clinical Lecture on a Common Defect in Eye Construction Requiring Use of Convex Glasses.* (Delivered before the Medical Class at the University of Maryland.) By JULIAN J. CHISOLM, M. D., Professor of Eye and Ear Diseases in the University, Baltimore.

"I am 18 years of age, and am perfectly healthy—all to my eyes. They pain me only when I use them. When I do nothing, I suffer no discomfort; should I sew or read for a half hour, my eyes burn, my head aches, with a weary feeling over my brow, and I am compelled to put up my work and rest. My eyes do not then regain their feeling of comfort for some hours. This trouble has been going on for twelve months. Rest seems to bring no permanent good to my eyes, as I cannot use them as long to-day as I did six months since. They give out much sooner than formerly. On one occasion, being very desirous of finishing a piece of work, I thought I would try my mother's glasses, and was delighted to find that I could sew for a much longer time without discomfort. I have often, since that experiment, surreptitiously used them. One day my father caught me with them on, and frightened me about putting my eyes out by using spectacles. Our doctor told my parents that if I continued to use them I would become totally blind. The doctor called it straining of the nerve and congestion. He gave me medicines to take, and eye-washes to use. He advised me to have my ears pierced. This did no good. He then kept me in a dark room and put blisters to my temples, and, on one occasion, leeched me; but instead of getting better, my eyes got weaker all the time."

Such, gentlemen, is the daily recital of troubles poured into the ear of the specialist in eye diseases by anxious patients, who have sought in vain relief at the hands of their family physician. Persons suffering from the symptoms as described by this patient are numbered by tens of thousands, and form a very large percentage of eye troubles. Fortunately for suffering humanity, when the condition is properly understood, the remedy is of easy application, and is a sure relief. Experience and observation have taught us that this young lady is suffering from

a defective form of eye, and not from a disease, and that a carefully-selected pair of convex spectacles will correct the entire trouble. Accident has indoctrinated her into the deductions which science has revealed to the student in optics in its relation to the construction of the human eye.

There is a very wide-spread belief, among even professional men, that spectacles should be restricted to the old; and even by these to be worn under protest. An exception to this fundamental rule they recognize in near-sighted persons only. By the profession at large, an eye that sees well at a distance, and becomes red and painful upon close use, is called a weak, inflamed eye, to be treated by astringents, dark rooms and counter-irritants—always to the annoyance and detriment of the patient. There is a rule in eye surgery that has very few exceptions, and I desire to impress it upon your minds, viz.: That an eye which becomes painful only when used upon near objects, as in reading, writing or sewing, and gives no discomfort when not closely employed, *is an eye that requires physical not medical help.* In by far the majority of such cases, carefully-selected spectacles will correct the difficulty, and enable the patient to control the uses to which his eyes shall be put.

Although all physicians are aware that there reside *in our eyes* muscles which are as instrumental in making us to see as are the muscles of our legs in enabling us to walk, the important functions of these intra-ocular muscles are constantly lost sight of. It is the work of the muscles in the eye to so act upon the lens as to enable it to accommodate our vision to various distances. We must, therefore, never forget that all of our eye work is not so much nerve work. It is largely the work of muscles.

We can now understand why the eye is made so constantly weak for near work by prostrating diseases. The child who was so proficient in reading, passes safely through an attack of measles, scarlet fever or diphtheria. When, to all appearances, recovery is complete, he finds that he can no longer read his school-books; after a very few minutes letters run together, and words become blurred beyond his recognition—distant vision remaining at all times clear. To compel a child, under such circumstances, to pursue his studies, entails serious suffering, and

sooner or later, a complete breaking down for all eye use. Should such a patient be carefully questioned, he would complain of a constant feeling of being tired, aggravated by even moderate exercise. The child is made to ride to school because a ten minutes' walk is too fatiguing so soon after an attack of sickness; yet the pain induced by the studying of lessons, necessitating hours of eye-muscle use, has not been associated with the fatigue from manual labor, or from even going up one flight of stairs. Should the experiment be tried of putting a proper magnifying glass before such a child, eye work is at once rendered easy. The convex lens does away with the necessity for eye muscular work, as the carriage did away with the necessity for leg work; and both the eyes and the legs being rested, fatigue is avoided. When the legs and the eyes get strong, with complete recovery from the prostrating effects of the disease, then both the carriage and the spectacles can be dispensed with. After any prostrating disease, if the eyes become painful upon use from overwork of enfeebled muscles (so often called, by the ignorant, straining of the nerves of sight), rest and tonics will correct the trouble. When general strength is regained, eye muscular strength comes with it, and all kinds of eye work can then be painlessly resumed.

The case before us is not, however, of that character. This young lady has not been sick. She does not complain of muscular weakness. Hard work does not tire her. She is robust, and can take any amount of exercise. Of all the muscles of her body, the eye-muscles alone give pain upon use, and this discomfort is steadily on the increase, notwithstanding her perfect health; yet her eye-muscles are actually as strong in proportion as her body-muscles. In her case, another factor must be taken into account.

Although there is a general plan upon which the human eye is constructed, the length of the eye varies as much from a given standard as does the height of the individual. Should 5 feet 10 inches be accepted as the standard of height, a very great number of persons would be found who would fall short of or exceed these proportions. So is it in the measurement of the eye. Should we accept $\frac{9}{10}$ths of an inch as the proper length of an eye from before backwards, a variation from that standard, either more or less, must be exceedingly common. Good sight consists

in the accurate focusing of light from an object, by means of the crystaline lens, upon the retina, which irritation thus produced is conveyed by the optic nerves to the brain for interpretation—as in the use of the microscope the adjustment must be accurate, or a clear picture of the object looked at will not be obtained. In microscopes of short focus, the slightest shifting of the glasses throws the image out of focus and blurrs the picture. The lens within the eye is also of so very short a focus that the slightest variation in the normal depth of the eye from the lens to the retina would prevent the concentration of light into sharply-defined pictures upon that portion of the retina designed to receive such. Whatever be the impression made upon the retina, whether from a sharply-defined picture or an indefinitely outlined one, the same is transmitted to the brain for final interpretation, and an expression is delivered in accordance with the clear or blurred picture produced thereon.

The law governing the passage of light through convex lenses always establishes the focus as for distant rays. If the source from which the light emanates is brought nearer to the lens, its focal point recedes in a fixed ratio to that approach. Should nature or disease give a longer antero-posterior diameter to the eye-ball than the accurate focal distance of the lens, it would be only necessary to approach the object from which the light proceeds, and the lens focus gradually elongating itself, will finally reach the sensitive surface upon which a sharply outlined picture will be thrown. In this way is established the distant point for clear vision for such more or less near-sighted person, whose eyes, as is well known, are longer in the antero-posterior diameter than the standard of measurement calls for. Close work, especially when long continued, may cause such a constant congestion of the whole eye (for every organ of the living body contains an excess of blood when in use) as may gradually soften the sclerotic coat. Should, at the same time, an increase in the humors of the eye take place from the excessive supply of blood, a bulging of the eye-ball in the vicinity of the optic nerve entrance is very apt to occur. This would lengthen the eye-ball, and therefore would materially interfere with the ability of the lens to concentrate light from distant objects. The ordinary case of increasing near-sightedness,

in which distant objects become more and more foggy, and only near objects are sharply outlined, is in this way easily explained. The slow-yielding of the back structures of the eye chamber, recedes the sensitive surface of the retina upon which the image is to be focused.

Although the entire retina, with its rods and cones, granule, cellular and fibrous layers, all told, is hardly as much as half of a line in thickness, it is only upon the outside lamina of all of these many transparent layers that the sharply-defined image is received for good vision. Should the concentrated light from an object be focused without this lamina, or upon any of the inner layers of the retina, the image transmitted to the brain by the optic nerve would, from necessity, be a blurred or unfocused one. There are many eyes so constructed by nature that they are not deep enough to allow the outer layer of the retina to catch the concentrated focal light. They are more or less flattened eyes, with so short an antero-posterior diameter, that the lens in its passive-quiet state is compelled to locate its focus of light behind the proper retinal surface. Nature can only correct this congenital defect by making the lens actively stronger, for only under such circumstances can it focus upon a nearer point. To muscles within the eye-ball this function of augmenting the thickness of the centre of the lens, by which its concentrating power is increased, is assigned.

The ciliary muscles, the base upon which the ciliary processes are developed, form the accommodative machinery of the eye. This muscle consists of two distinct portions—one of radiating fibres, which are attached in front to the ciliary ligament and run backwards to be incorporated with the choroid coat. By drawing the choroid coat forward, it fixes the lens steadily in its vitreous bed. The other portion of the muscle consists of circular fibres, which act through the zonula of Zinn (the name given to the membrane which suspends the lens and hangs it securely in its proper position), and, by peripheral pressure, displace the marginal lens substance.

The crystaline lens, notwithstanding its fibrous, tubular and laminated structure, may be considered a mass of soft, plastic jelly, perfecting its development in young persons about the age of puberty, and after that slowly consolidating through adult

life to obtain a waxy consistency with old age. This jelly fills the capsule or bag which holds it. Should any of this substance be pushed away from the edge of the lens, it must, of necessity, take up some other position within the capsule, at some point where there is least pressure, and thereby cause the antero-posterior diameter of the lens to bulge towards the pupillary space. The thicker the centre of a lens is, the shorter always its focus. The circular fibres of the ciliary muscle, by increasing the thickness of the lens centre at the expense of its displaced edges, enables the shorter focus to fall upon the proper layer of the retina in this naturally short eye. When the eye is a short one, these circular, muscular fibres of the ciliary region are much developed at the expense of the radiating ones, which, not being wanted, waste away. On the contrary, in the long or near-sighted eye, in which there is a constant desire to shorten the antero-posterior diameter, these radiating fibres become very numerous and strong, while the unused, circular fibres undergo atrophy.

In a typical eye as to dimensions, called by the ophthalmic surgeon the emmetropic eye, the distance to the percipient layer of the retina from the lens, measures accurately the focus of the lens, as it lies passively within its capsule. With such an eye, distant objects are sharply seen, without any increase in lens thickness, and, therefore, without muscular action, effort or consequent fatigue. To see at a near point small objects with this perfect eye, the lens must undergo much thickening in its antero-posterior diameter—effects of displacement of the edges of the lens through the action of the ciliary sphincter muscle. In such an eye this muscular effort for a person in ordinary health may be considered as moderate exercise, and may be indulged in for hours without discomfort.

As persons may use their leg muscles in walking all day and not feel excessively weary, so with the eye muscles one may read all day without annoyance. Let, however, any disease prostrate the muscular system; then, for the same reason that a person could no longer walk an hour without painful fatigue, he cannot use the muscles within his eyes without a corresponding trouble.

Should nature have made the eye too short in its antero-posterior diameter, so that the lens at rest cannot focus sufficiently

forward to concentrate light upon the retinal surface, the defect must be compensated for by a temporary increase of thickness in the lens—purely a muscular act. During the waking moments of a person with such a flat eye (a condition called hyperopia) the eye muscles are always in a state of more or less contraction, not necessarily fatiguing. When such an eye is put to close work, an extraordinary effort on the part of the muscle is demanded to make the lens sufficiently thick, and this excessive muscular work must be kept up as long as the eye is in use. This overwork necessarily fatigues, and, if persisted in, will cause pain, first in the eyes, then in the head, extending some times to the neck, and, in a few cases, even down the spine, accompanied with more or less giddiness, nausea and other discomforts. While these extra muscular efforts are being made to sustain the needful degree of accommodation, exhaustion may overcome the contractile power, and with a relaxed muscle, the lens will flatten itself. The small object, a moment since so clearly seen, is no longer focused, and necessarily becomes blurred beyond recognition. Close the eyes for a few minutes (which means rest not for the nerves, but for the muscles), and the sight comes back in all its former sharpness. It will, however, only continue for a limited period; for, like the weary limbs, resting for short periods, under a forced march, the muscles soon again will give way, and the close work has to be finally abandoned. Rest always helps such flat eyes. The fresh muscles of the morning will always do more work than the tired muscles of the evening; and in school life, Sunday's rest makes strong eyes for Monday's lessons; but a week's application gives worn out eyes for Friday's studies.

Should any general causes for disordered health occur, the eyes of such persons, at all times overworked, are the first organs to indicate by impairment of function their defective construction. Age, also, with its hardening effects upon the lens substance, must increase the labor in the ever overworked muscles in flat eyes. When we refer to age in reference to eye development, we mean those retrograde changes in the lens which commence soon after its maturity, viz.: before puberty. At 18 years of age, before the body has matured, the eye is already growing old—not perceptibly in well-shaped eyes, but appreciably in

the flat eyes which we are now discussing. In such persons a period will soon be reached in which the muscles cannot do the work required, and any attempt at protracted eye use will cause them to burn, redden and pain—a condition often miscalled inflammation, and maltreated by antiphlogistics, as if congestion was the primary and only trouble. Do away with the necessity for overstraining, and congestion will no longer be engendered. The object of the muscular work being to add strength to the lens, effect this by supplementing a pair of suitable magnifying spectacles to the lens within the eye, and the combination of artificial and natural lenses will shorten the focal distance, and will at once remove all necessity for extra muscular work. By aid of the spectacles, the eye can remain comparatively at rest, and is enabled to work in peace and comfort.

The flatter nature has mismade the eye, the stronger must be the supplemental lens. In cases of flat eyes varying from the least encroachment upon the typical measurements to very decided shortening of the antero-posterior diameter, it is very easy by means of the optometer, an instrument already explained, to determine the degree of flatness, and, at the same time, the strength of the additional convex lens necessary to the perfect correction of the defect. In patients with flat eyes, age gives no data upon which to calculate the strength of the lens required. Every perfectly formed eye must grow old with the body, and at ages ranging from 40 to 50 years, must need the aid of magnifying glasses. These spectacles must be increased in strength with the still advancing age, which is synonymous with advancing hardness and diminished plasticity of the lens substance, and with the age flattening of the lens form, which is always brought about by this natural senile shrinkage.

The use of magnifying glasses, as we have now seen, must not be exclusively for the old. An eye too much flattened at birth, so far as near, clear, comfortable, sharp sight is concerned, is in a similar condition to the old eye in which age has hardened, condensed and flattened the lens. These both need the same correction by magnifying glasses, the strength of the spectacle depending upon the senile flattening of the lens in the aged or the naturally shortened diameter in the young. Many a child of ten years of age, on account of the abnormal flatness of his

eyes, needs as strong a glass as his grandfather of 60 requires. With increasing years, both will need glasses of increasing strength. Such a child will never outgrow the necessity for their use, as nature has indelibly stamped the need for them with his being.

The parent or physician who, under the weight of authority, on the plea of youth, refuses to sanction the use of magnifying glasses to those who so sadly require them, is a serious stumbling block to the education of his wards or patients.

The case before us belongs to the order of hyperopic or short-eye. Magnifying glasses of 24 inches focus will take away the entire strain, and will enable her to read or sew for as many hours as she chooses to work.

Such flat eyes are usually strong, sound ones, and will last as long as the most perfect of eyes. There is no disease about them—only an optical defect to be corrected. This is a very different condition from the near-sighted or long eye—always one more or less disposed to take on disease and give trouble in many ways. In short eyes, the defect must ever be there, and the correction by suitable magnifying spectacles, should ever be made, to establish good and painless sight.

The fear is often expressed that if one so young commences the use of glasses, they may, in time, exhaust the list, and then what shall become of them? The answer to all such timid persons is, that the list of spectacles, as regards their number or strength, cannot be exhausted. There is a disease of the eye called cataract, in which the clear lens of the eye becomes cloudy, and prevents the light from passing to the retina. As there is no means of making this opaque lens again transparent, the operation for cataract consists in taking this lens out of the eye altogether; and nature never replaces it. Art, however, furnishes a lens strong enough to do the entire work of the lens removed, and restores excellent sight. In the flat eye, with its clear lens, we are only called upon to add to the lens already present. If we can, therefore, make good the work of the entire lens, the supplementing for any part of it is comparatively of easy accomplishment.

ART. III.—(1.) *Partial Paralysis due to Phimosis.* (2.) *Pott's Disease, and its Treatment by the Plaster-of-Paris Jacket.* A Clinical Lecture by Professor LEWIS A. SAYRE, M. D., delivered at Bellevue Hospital Medical College, April 4, 1877. (Stenographically reported especially for the *Virginia Medical Monthly*, by N. W. Cady, M. D., New York).

CASE I.—**Reflex Paralysis from Phimosis.**—Child, male, 3 years of age, of French parentage. Family history good. Partial paralysis of legs with complete eversion, similar to the "first position" of the dancing master. The mother states that the child has been in the state you see him for the past three years, and that he has never walked. Here is a fine case of calcaneo-valgus, the heels of both feet being extended to their utmost capacity. He can flex the thighs, as you observe. I prick his leg with a pin, and under the stimulus he flexes his legs, showing that there is sufficient muscular contractility to straighten his legs at the thigh, and also showing that there is no paralysis at that joint. His gastrocnemii, solei and plantar muscles are good for nothing, and the result is his heels project in the peculiar manner observed. The peroneals are stronger than the tibialis anticus, and the result is, his feet are abducted, heels depressed and feet everted, constituting a calcaneo-valgus. Plantar arch, of course, he has not, and his sole is flat. In the place of the tibialis anticus, along the spine of the tibia, you will observe quite a deep depression, and by its absence the foot is allowed to hang loosely like the end of a flail. The left foot is even worse than the right. He is well nourished; his temperature is good, but still he lacks sufficient muscular tonicity to hold himself in position, and that is the reason he has become so distorted at his knees. The weight of his body has crushed his knees inwards into that abnormal position.

In this case, any cutting of tendons would be worse than useless—worse than folly, for the deformity is of paralytic origin. He never should have been permitted to walk or stand up without mechanical support. By seizing the leg at the knee in one hand and the thigh in the other, and by pressing the inner condyle outward, I can easily bring his leg now into its proper position without causing him any pain. By the construction of an instrument having a pelvis belt, jointed at the hip, with an arm to grasp the inner condyle and force it outward, and with a movable joint opposite the ankle joint, having an elastic India

rubber strap attached to the heel and running to a fixed point behind the upper end of the gastrocnemius or tibia, and with an elastic strap from the top of the instep to the top of the tibia to aid as artificial muscles—with an instrument like this to bring the foot in position, and with these substitutes for muscles, the child will be enabled to walk. Then, with the use of electricity and the hypodermic injection of $\frac{1}{60}$ to $\frac{1}{30}$ of a grain of strichnia, you will often find, to your astonishment, great development taking place in the muscles of these children.

Let us examine the penis. You observe the orifice of the urethra is pustulous and of a bright, red color. You see the prepuce is rather long, narrow and contracted and adherent around the posterior lower surface of the glans; and in attempting to retract it, this anterior portion of the prepuce goes over the glans and girdles it. The urethra, as you see, is pouting outward and everted, and you notice red granulations, a regular granulation at the orifice of the urethra; it looks like a regular urethritis through long continued inflammation. Now, I will just touch this red mucous point and watch the result: There is an instantaneous spasm, quite different in degree and kind from that produced by pricking the child with a pin in any other part of his body. When I stick him with a pin, he moves his leg out of the way and he kicks. But there is a difference in his movements when I touch the orifice of his urethra. You see the quickness of his movement. It is like that produced by an electric shock.

I shall now remove this source of irritation by freeing the adhesions of the prepuce and the glans, and dividing the prepuce. As I draw back the prepuce, you will observe this white, chalky concretion lying behind the glans at its base. I want you to notice what I am doing, very carefully. If I leave him as he is now, I shall have done no good, but will have left him in a worse state than before. I have torn off the prepuce from its adhesions, divided the frænum behind, and taken off this smegma; but if I leave him as he now is without any further division than I have done, although I have exposed the glans perfectly, there is yet a contraction at the end of the prepuce which is now behind the glans, and at this point it girdles the organ. This girdle is tighter than it should be. It is necessary to make

a nick in it. Trifling as this little operation may seem, it is so important that I draw your attention to it especially; for only last Saturday a child was brought to my office from St. Louis. He was a perfect little demon, and as uncontrolable and wild as any lunatic you ever saw in your life. He was eight years of age. He attempted to talk all the time, and his tongue ran like a tornado, and his little legs carried him about in every direction at once. He would whirl around like a gimlet, on his right foot, like a flash of lightning, and he had been keeping up this performance the most of his life. Dr. ———, who had charge of his case in St. Louis, read in the *Medical and Surgical Reporter* a lecture given in this room describing some of these cases, and he immediately took it to the child's father. "Here," said he, "that is your boy's case exactly." This gentleman, who is an engineer, read it carefully and recognized it as being correct. He did what I am now doing to this boy. He pulled back the prepuce by main force, loosened the prepuce from its attachments; but he did not cut the frænum—he simply pulled the prepuce back, and fairly uncovered the glans, but it did not stay there. So he tied a string around it to keep it there, (?) and the result was that the boy got worse than ever, and he did not entertain a very high idea of Dr. Sayre's plan of treatment. They cut off the string and abandoned the case. After that the boy improved a little and became better, but the head of the penis came very near being completely strangulated.

In view of this much improvement after cutting off the string the old Doctor persuaded the father to bring the child to me to find out what the difficulty was, and to see Dr. Hammond. I saw the child at my office. The glans was perfectly uncovered, but the frænum was not cut, and the end of the prepuce still girdled the glans. I sent the little fellow to Dr. Hammond as an interesting example of reflex irritation, and he discovered the bloodvessels at the base of the brain enlarged (so the father states) to four times their normal size. I asked him if he examined the glans penis, but it seems he did not look at that at all. Dr. Pallen, Dr. Yale and one or two others were present in my office when the child returned. We simply pulled the prepuce back, and made a slight incision through the tightened band, as I did here, loosening the girdle. Putting some persulphate of

iron on it, we then divided the frænum behind, and at that point was found a hard, white, stony concretion. As soon as the operation was done the child took a chair and sat down, perfectly quiet. In about fifteen or twenty minutes the father burst out crying—"Look at that child—he never did so in all his life!" He went down stairs, and something occurring so that he could not get away at the moment, the child stood perfectly quiet by the court door without making the slightest attempt to run away, nor did he act differently from any other child—a thing that his father said he had never done before. I went to the hotel in the evening to see the little fellow, and found him lying sound asleep. He got up at four o'clock to urinate; went to sleep again and slept eleven hours. There was no narcotic given. I gave him no anæsthetic at the time of the operation. Next morning he told his father to *telegraph* his mother, his father said, as distinctly as any person in the world—using a word, telegraph, which he had never used before. In fact, he had scarcely ever spoken any words before that could be comprehended. I took Dr. Clymer to see the child four days after the operation. He conversed with him nearly a half hour on various topics which children understand, and observed that his reasoning and other faculties were as good as those of any child of his age. On the sixth day after the operation I took him to Dr. D. B. St. John Roosa, who certainly is a very experienced person in the use of the opthalmoscope. He examined the eyes with the greatest care, and stated that the bloodvessels were perfectly and absolutely normal. Now, if you grant that these vessels were four times their normal size—I did not see them myself previous to the operation—it was a most marvelous effect upon the contractility of these vessels that they should be restored to their normal size in so short a space of time. But, so far as the child's happiness and conduct are concerned, he is an entirely different child. His father states that it was like getting out of a hurricane into a mild storm; and on the third day after the operation he said, "I think it is like getting from a storm into sunshine. This boy has always been like a steam engine with a full head of steam and no governor." I think this professional comparison is excellent; the boy could not co-ordinate a single muscle.

To return to the case in hand. You see that the wound has stopped bleeding. We will leave the rags soaked in the styptic just as they are. It will not be necessary to disturb the dressing for several days, when by soaking it in a little warm water, etc., it may be removed very readily.

This little fellow, of course, has such a physical deformity, owing to the long continuance of his trouble, that instrumental means must be resorted to for the purpose of overcoming the distortion in the bones of the knees. Now, if it had not gone to the extreme point of deformity of the bones and joints, I should do nothing for the child but let him alone for two or three months to see what effect this simple operation alone would have—without resorting to any treatment, either by strychnia, electricity, or mechanical appliances to hold him in shape. Even as it is, I am inclined to let him alone for a fortnight to see what effect the operation will have towards restoring his muscular capacity, without the use of any internal or external remedies. This I shall do merely as an experiment, leaving him as he is for a fortnight before instrumental or other means are applied, to see what will be the effect of the operation upon his muscular system alone. Afterwards, whatever instrumental and other means may be necessary shall be resorted to for the correction of his deformity.

The following measurements are now made:

Calf of right leg, - - - - 6¾ inches.	Middle of right thigh, - - 9½ inches.
Calf of left leg, - - - - 6 inches.	Middle of left thigh, - - - 9 inches.

[The penis was dressed by encircling it completely with a soft *nidus* of lint, wet with cold water, and retained in place by a diaper—REPORTER.]

CASE II.—**Pott's Disease.**—B. M., aged 4 years, male. I bring this case before you as a specimen very clearly exhibiting the valuable effect of the plaster-of-paris jacket after suspension, in Pott's disease. The patient was brought before you four weeks ago for examination. At that time he presented the typical features of the disease, having that peculiar pallid skin which all these children have simply from want of proper oxygenation of the blood, owing to their defective respiration. He had Pott's disease in the fourth, fifth, and sixth dorsal vertebræ, the result of an injury. The disease had been coming on for

some months, but it had not been suspected until a few days before I saw him. He had been treated for some other trouble than the trouble in the spine. He had a cough which his doctor said had no connection with pneumonia, and which he pronounced to be a nervous cough. I have no doubt but that he was right in that respect. He was troubled with indigestion, eructations of gas from the stomach after eating, and consequently great restlessness and uneasiness. At last he began to loose the power over his legs and tumbled down very frequently, being all the time inclined to rest his body upon his elbows or upon his hands. He had taken large doses of santonine for worms, and had been treated in that manner for many months before he was brought to me. Whenever he attempted to walk, it was always with his hands on his knees, and if he lifted his hands from his knees at all, he would not do so until he could grasp a chair or some other object. He could not be induced to stand erect unless he had some support to the upper portion of his body, either by his elbows or hands. On throwing any object down on the floor, and requesting him to pick it up, instead of bending his body directly forward by the spine and picking the object up, as healthy children naturally do, he would come up close to the object and then allow himself to come down in that careful perpendicular manner, and pick it up from the floor.

Upon examining his spine, as you remember, I laid him upon my lap face downwards, and opened my legs, and immediately he began to have free respiration. You will probably also remember my drawing your attention to the peculiar *grunt*, which, as soon as I expanded my legs, ceased, and was followed by normal respiration. Then, when I pressed upon his spine, *he had no pain* whatever, as long as his body was extended over my thighs. On the contrary, when I pressed him over the projecting point (there was quite a large projection, three of the vertebræ being involved in the disease) while he was extended in this manner, he was easier. I want to draw your attention especially to this fact, for the reason that it is laid down by almost all authors that direct pressure over the projecting spinous processes of the diseased vertebræ causes pain ; it is just exactly the reverse of that. If the body is expanded or extended,

pressure at that point rather relieves the pain by still further expanding the spaces between the diseased surfaces and removing pressure from them. When I crowded him together with one hand on his head and the other on his sacrum, then, of course, he had that sharp pain and peculiar grunt, which are so characteristic of the disease. Also, by going to the centres of each pair of ribs and crowding the heads of each pair towards the spine, I gave him no pain at all till I came to the fifth, sixth and seventh ribs, and each one of them, particularly the sixth, gave him that peculiar spasm and an increase in pain, showing that it is a very essential point in diagnosis to make this lateral pressure to bring the heads of the opposite ribs against the sides of the bodies of the vertebræ.

The child was brought to my office next day, and the plaster jacket was applied there. No sooner had I swung his feet clear of the floor preparatory to the operation than he screamed out "That's dood!" And when he was firmly secured in the plaster and laid down upon an air bed to dry, and I asked him how he felt: "Better, thank God," said he! From that time he has been perfectly well, so the mother states, until to-day, when she brought him to the office, saying that his breakfast hurt him, and that during the last two or three days he has not been able to eat as much as usual. He has gained somewhat in flesh, and he is inclined to eat so much that his mother says she is afraid to give him as much as he would eat!

The most extraordinary feature of the case was the rosy color of the cheeks. As his mother says, his cheeks began to grow red from the day after the plaster jacket was put upon him. I have observed this effect in very many cases, and it is owing to the fact that, being fixed in this manner, the chest is expanded to its fullest extent, and when kept secured the capacity for air is so much increased that the oxygenation is more complete, and thus produces that peculiar rosy color.

(Putting the child on the table). You see his deformity has almost entirely disappeared by his being stretched out. I shall not take the jacket off him yet. By his increased growth in the past four weeks he has been rendered uncomfortable by the tightness of the jacket. I have brought him here to show you how to remedy this trouble. By simply sawing open the jacket, but

leaving untouched the elastic shirt which is next the skin, a sufficient amount of room is left to render the child comfortable without compromising the supporting power of the jacket. The shirt is elastic, and that is a very important point to be observed in applying the jacket properly. The shirt should be woven or knit; or, if you are out in the country, the next best thing is to get some old woman to crochet a shirt for you. The ordinary woven shirt that you get at the shops will *not* answer your purpose. I may seem over particular about these little things, but it is because failure to attend to just such details has brought the plaster jacket into disfavor in the hands of those who fail to pay attention to details, and for this reason many patients will be deprived of the benefit of it; whereas, if you take in this small point to which I draw your attention, you will find more satisfaction in the treatment of these cases than in anything else that you can possibly conceive of. You will find children like this—unable to walk, stepping about like invalid, superannuated men, constantly crying all the time and scarcely eating at all—you will find such children, I say, as soon as the plaster has set hard as this has, frolicking and playing the same as if nothing were the matter with them. The diseased spine is held absolutely immovable; all pressure has been removed from it; the reflex muscular contraction which was drawing the diseased surface together has been overcome by suspension of the body, and the whole body has been fixed by this plaster being put upon him over a shirt that tightly fits him, and it fits him with such accuracy that there is no uneven pressure, and no further cause of irritation. This is the reason why I have brought him here to show you the necessity of having, in the first place, a shirt that fits smoothly; and in the next place to show you how (after the course of five or six weeks when the child has started growing again, and has filled the jacket so full as not to be able to stand the increased pressure) to relieve the pressure by sawing open the jacket. The plaster jacket and the shirt are very closely adherent, every thread of it leaving its imprint in the plaster. First separate the shirt from the plaster along the line of the intended incision—no further—by means of a paper knife or a small piece of wood, and then cut the jacket open; the elasticity of the shirt will allow the jacket to expand sufficiently

to obviate any further trouble, and, at the same time, the adhesion of the plaster to the shirt will hold the jacket to him, so that there is no necessity for a retaining bandage. In that way the plaster will accommodate itself to two or three weeks further development, and allow the child to go about in comfort and eat all he wants. The less frequently the jacket is disturbed the better, and by this little arrangement you will gain two or three weeks. You see this little fellow, the moment the jacket was cut open he was relieved, and now his appetite may be satisfied without discomfort.

You see the color of his skin—the cheeks and lips are those of perfectly good health, and he has no tendency to put his hands on anything for support, but he runs about with perfect freedom. Any person seeing him with his clothes on could hardly notice anything about that child except what is usual in any one of his age. Take the support off of him, and inside of two minutes he would be going about reaching for this, that and the other object to support him, and his color would soon fade away.

As this case progresses more and more towards a cure, and he becomes too large for the jacket, it may be cut open along the front and a piece cut out and the shirt selvaged on the edges with glue or starch, and the boy washed as often as may be necessary. When this measure is resorted to, of course the plaster is to be held in place by a roller bandage.

By the way, it would not be bad treatment—and I believe Dr. Flint is going to adopt the plan—to confine the chest in a plaster jacket in pleuritis to prevent the motion of the diseased surfaces, thus compelling the diaphragm to do all the work, and give absolute rest to the parts involved in the disease.

CASE III.—C. F. D., male, aged 18 years. Pott's disease in the upper dorsal region. I wish to show you another case of Pott's disease in a more advanced state, one which has been under treatment by means of iron braces and the like for the last fifteen years or more, without producing any effect except to aggravate the disease. He came to my office last week from Indiana. When he was 3 years of age his nurse, who was carelessly swinging him around in her arms, allowed him to fall, and almost immediately afterwards there were developed symptoms of disease in his spine. It has gone on from that time to

the present, and although he has had instrumental treatment a great portion of the time, and for the last three years has worn the instrument he now has on, the disease has still progressed. As the case is of interest as showing the curious mechanical ingenuity brought to bear in the construction of these instruments, I thought I would bring him here for the purpose of showing what an amount of torture a human being will voluntarily endure for the purpose of overcoming a deformity by any means which seems to promise relief.

You will observe that this young man has an apparatus somewhat similar to Taylor's brace or spinal supporter. It has a pelvis belt going around the pelvis, but it touches him only at the sacrum. On either side of the pelvis, you will observe, my hands pass between the crest of the ilium and the instrument with perfect freedom. From the centre of this belt you perceive two uprights running up the spinal column on either side of the spinous processes, and they have been made to curve precisely to the deformed spine. They terminate in two branches curving over the shoulders, carrying iron loops which run over the shoulders and under the armpits, and are buckled to the main part of the instrument; this has the effect of buckling him backward. Then it is buckled around him by various straps and bands, and on the lower part of the instrument behind, is rigged out this *rumble* as it might be called, intended to receive a shaft passing through a hole in the upper part of the instrument, and to the shaft is attached a head-and-chin collar, something like Taylor's chin supporter. The agony caused by this ingenious contrivance was so great that he had to give it up; when it was on tight enough to give him any benefit he could not eat. Dr. Taylor says that in order to open their mouths, the patients *lift up the tops of their heads* alligator-wise, but you all know that this is an anatomical impossibility. We lift up this man's shirt and you see the effects of the uneven pressure exercised by this instrument. Here is a galled point at the top of the sacrum; two more extensive galled spots on either side of the spinous processes at the seat of the deformity, where the vertebræ project like the dorsal fin of a shark, and where the blood supply has been almost cut off; then upon his abdomen, under his arms and across his chest, you will observe other galled and chafed spots and lines.

The agony caused by this instrument was almost unendurable from the irregularity of the points of pressure; yet he wore it, for he was obliged to have some sort of support to his back. This instrument is from Allen's Surgical Institute at Indianapolis.

There is another point in its construction. There are two little rods, extensible, running downward from the sides of the belt, and so arranged that when he sits down the weight of his body is received upon them, but it only has the effect of tipping him forward, so that the greater part of the pressure is received upon the sacrum, producing the galled sore at that point. This is the common method of treatment in these institutions for Pott's disease. I don't know how many of these instruments I have taken off and kept,—I think some twenty or thirty within the last month; and all the patients complain of the same agony caused by wearing them. Still they cannot get along without them—they must have some support and that is the great difficulty with all these "spinal supports;" they enable the patient to get about by the support given them, but they never cure the disease. I have had many patients who have worn this apparatus, and yet they have had to take them off on account of the pain; by fixing them with the plaster jacket they have recovered. The original brace of Taylor was a valuable instrument, in that it had a jointed piece, enabling the body to be bent backwards, thus bringing its weight on the transverse processes of the vertebræ, which are hard and do not absorb by pressure. But this new instrument, with its irons bent to exactly curve to the deformity, and with a continuation going over the shoulders and binding them down, absolutely prevents the normal development of the body, and increases the curvature of the spine by its repressing action.

We will now remove this man's harness, and, although his skin is not in a very good condition for the application of the jacket, we will put him up in the plaster jacket; his skin, though badly galled when he came here, having healed sufficiently to justify the application of the shirt and jacket.

[The Professor proceeded to suspend the patient by the neck and armpits, and as his feet cleared the floor and he hung free, the curve in his back was lessened materially, sufficient to be seen by the class. The plaster jacket was immediately applied, and the patient laid on an air bed to dry; before it was com-

pletely dry he expressed himself as being able to breathe more easily than ever before for years. After the jacket had set, he was measured, and it was found that he was *taller by* 1¼ *inches* than he was before the plaster was put upon him.]

ART. IV.—*Goa Powder.* By T. ROBERTS BAKER, Grad. Phar., Late one of the Vice Presidents of the American Pharmaceutical Association, etc. (Read before the Richmond Pharmaceutical Association, March 13, 1877.)

A substance called "goa powder" has recently been attracting considerable attention in Europe, as a valuable remedy for a number of skin diseases. And quite a number of articles on the subject have been published in the medical and pharmaceutical journals, both in Europe and this country. Judging by what has been claimed for this substance as a remedial agent, it is probable that its use may soon be introduced here by the medical profession; and if the experience of some medical men in other parts of the world should be confirmed by that of the profession in this country, it may possibly be incorporated in the next U. S. Pharmacopœia.

The geographical source of goa, is Brazil, and according to Dr. Bomfin, the tree which yields this powder, is one of the largest tropical trees. It is found growing between latitude 13° and 15° south in the Province of Bahia, chiefly in the forests of Valenca and Camanu. It attains a height of from 20 to 25 metres, and a diameter of from 5 to 6 metres. The flowers are small and violet colored; the bark, smooth and dark green. The wood, when fresh, is of a yellow color, and turns dark by age. In this condition, it is easily reduced to powder, which is the goa powder of commerce.

It has long been used as a domestic remedy in Brazil, under the names of "Bahia powder" and "Araraba powder." Nearly all that is sent abroad is taken by the Portuguese, who have, for many years, supplied their possessions in India from Goa, the name of an old Portuguese settlement, on the western coast of India; hence its commercial name of Goa Powder. It has also been used for many years in Cochin, China, as a ring-worm powder, and on the Malay peninsula for the same purpose, under the name of "Poh di Bahia." Scientific investigations have

shown that these powders are one and the same thing, although used in several countries under different names.

In a short article on goa powder, in the report on the progress of pharmacy, in the proceedings of the American Pharmaceutical Association for 1875, it is stated that most encouraging results have been obtained in England in the treatment of painful eczema, lupus, and cancer. The favorite mode of applying the powder in tropical countries for skin diseases, is to wet the powder with water, vinegar, or lemon juice, and smear it on the skin; but Dr. Squire says that when thus applied, it speedily dries up, and is easily brushed off or blown away by the breath; hence he thinks it should be applied as an ointment. Dr. Polasne de Champeaux, a French naval surgeon, who had to treat a large number of cases of herpes, found this powder to be the only efficient remedy. Dr. Silva, of Lima, says that it is best applied in the form of an ointment, prepared as follows:

℞. Goa powder ..... ℈j to ʒss.
Acetic acid ..... gtt. x.
Lard ..... ʒi. M.

Dr. Squire says there is every reason to believe that chrysophanic acid is the active agent of goa powder. Prof. Atfield, President of the British Pharmaceutical Association, having made a chemical examination of goa powder, reports that it contains 85 per cent. of chrysophanic acid. This acid is also an ingredient of rhubarb, and is said to be its chief coloring matter. It is also found in one of the lichens. It has been isolated and is credited with the following characteristics:

It crystalizes in fine, golden, yellow scales. It is a very stable substance, and may be sublimed without much decomposition. Its composition has been given $C_{14}\ H_8\ O_4$; but C. Lieberman and O. Fischer think that an impure acid must have been used to obtain these results, and that reliable results can only be obtained from previously sublimed acid. According to these chemists, the formula of the acid is $C_{15}\ H_{10}\ O_4$ or $C_{14}\ H_5 CH_3\ (OH_2)$. Fownes' Chemistry gives it as $C_{10}\ H_8\ O_3$. Dr. Squire says that benzol is the best solvent for this acid for pharmaceutical purposes; but Mr. Gerrard, a London pharmacist, who has been experimenting with goa powder and chrysophanic acid, finds that vaseline is the best solvent for the acid. If chrysophanic

acid is the active remedial agent of goa powder (and the fact that it constitutes within 15 per cent. of the whole of it seems to imply that it is), then it may happen that the acid will be almost entirely substituted for the powder, and will take its place upon our shelves, along side of tannic acid, gallic acid, and other similar preparations, as another contribution to the list of elegant pharmaceutical products.

ART. V.—*Case of Death during Anæsthetization by Ether.* By BENJAMIN W. ROBINSON, M. D., Fayetteville, North Carolina.

In *October*, 1875, an elderly lady—of leuco-phlegmatic temperament, naturally of full habit, now reduced in flesh, mentally depressed, but lacking signs of specific cachexia—came from a neighboring county to consult me about a tumor of the breast. Many months before, a small lump appeared on the axillary side of the left nipple, which slowly enlarged for a while and then began rapidly to enlarge, encroaching on the axilla and dipping under the pectoralis major muscle, when I first saw it. Diagnosed encysted multilocular benign tumor (meliceris of older writers). As it was rapidly increasing in size, extirpation was advised. The patient, not being prepared to remain, returned home with the purpose of coming back in a week ; but a fortnight or more elapsed before she did so, during which time growth in the size of the tumor was very obvious.

November 6th. Resident members of the Faculty were invited to see the case, and concurred in the propriety of an operation. Etherization being established, an incision was made along the inner border of the axilla, four to five inches in extent ; below the middle of the axilla, the knife was carried in a direct line to an inch beyond the mamilla, exposing sac at different points. Cautious manipulation with end of the scalpel and scissors separated the integument from the sac sufficiently to allow the insertion of the fingers beneath, and by careful evulsion, the mass was dislocated from the axilla, exposing to view the axillary artery and vein. Nearing the clavicular region, firm fibrous bands and muscular fibres required frequent touches of the knife, under which a large vein in close relation with the cyst wall was cut, which startled me for a moment, by the copious gushing of blood and serum. The discharge was promptly arrested by the fingers of an assistant, and controlled till the dissection was completed, when the bleeding vessel was tied ; two or three branches of external mammary required ligation. Wound was mopped

with solution of chloride of zinc, brought together with interrupted sutures, and carbolic acid dressing was applied. A rather alarming syncope occurred at the conclusion of the operation, which, however, soon yeilded to restoratives. Wound through three-fourths of its extent healed by first intention. General health improving. Discharged cured (*apparently*) on 26th.

September, 1876. Patient returned, with a tumor of the size of an orange, which began at the inferior angle of the cicatrix in axilla, painless, but increasing in size. On consultation, operation was advised. On the 28th, a longitudinal section, embracing full extent of the tumor uncovered cysts. Very careful dissection failed to preserve sac in its entirety—cysts bursting under pressure of the fingers and confusing delimitary boundaries. However, all apparent diseased tissues were patiently removed without injury to blood vessels sufficiently to require ligature. Subsequent dressing as before. Union by first intention. Returned home in a few days.

About the middle of *January*, 1877, Mrs. M. came again, reporting that a few weeks after last operation, a small lump appeared in the back part of armpit, and a short time subsequently, near inferior angle of cicatrix of first operation; and in front of axilla, an opening occurred through which a teat-like fungoid projected, from which there oozed a straw-colored serum amounting to from half a gill to four to six ounces daily. This excrescence was of the size of a man's thumb, depending some two inches, filling up and diminishing variably. General health infirm. Medical adviser and patient both reluctant to resort again to the knife. An alterative and tonic course with local discutients was adopted—the patient remaining under daily observation for a week or two. There seemed to be decided improvement in general condition, with hopeful signs of local benefit. Returned home.

March 16th. Came again. The tumor, occupying the axilla, is bounded by the latissimus dorsi, and extends under the pectoral muscle to the clavicle, and in front to within an inch of the sternum. Posterior part firm, glandular (adenoid?); from fungus, upward and toward sternum, resilient and obscurely fluctuating. Pain for the first time is now complained of—numbness in the arm, from pressure on brachial nerves. Discharge heretofore—at least until within past two or three weeks—only slightly, if at all, offensive, has now a fœtid odor. Patient, rather urgently, desires another operation. Drs. McRae, Haigh, McDuffie, McNeill and O. P. Robinson, most of whom had been present and assisted in former operations, were invited to a consultation on the case. The feasibility, or a possibly, if not

probably, successful surgical procedure, being assumed, and under the circumstances demanded, was concurred in by consultants, as it was generally believed, that without it a fatal issue in a probably short time inevitably impended.

March 19th. Squibb's ether was administered from a conical inhaler—some twelve to fifteen minutes being required to effect complete anæsthesia. One ounce of brandy was given before the ether. Pulse, at first below the normal standard, improved in volume and force after commencing inhalation. An incision was made along the latissimus dorsi muscle, for four inches to the inferior point of the enlargement; from this point, the incision in a line to within an inch of the sternum, deflected toward the starting point, including the cicatrix and fungoid mcrescence, met one from the clavicle downward, which enabled the uncovering of the area involved. The axillary region was firstly cleared—stopping to tie arteries and a large vein. The *attenuated* fibres of pectoralis were divided to their upper boundary; the subclavian vessels were protected by the fingers of an assistant—while dissection exposed the intercostal muscles. In cautiously lifting the mass, it was found closely adherent to the *median* and *musculo-spiral* nerves, and a delicate dissection was commenced, when it was announced by those entrusted with the anæsthetization that the radical pulse which had been flagging, was extinct, and respiration irregular. Quick resort was made to subcutaneous injection of brandy and water, ℥ss, foot of the table raised to an angle of 60 degrees, head brought over end of table and depending, tongue drawn out, artificial respiration practised, hypodermic injection repeated at different points frequently, etc. The lapse of a few moments promised thorough resuscitation. The subject became conscious, speaking and desiring to be relieved of an awkward position of the arm; the horizontal posture was restored, and the operation proceeded with, which in two minutes more would have been completed. Returning syncope was promptly met with inverted position—subcutaneous injection of brandy and aromatic spirits of ammonia, artificial respiration; the electro-magnetic battery was employed for half hour, ineffectual attempts at resuscitation were continued, but death was pronounced.

I apprehend that too low a degree of vitality existed in this case to predicate a fortunate outcome. But the appearances were not more unfavorable than on former occasions. I feared the result; but what else could have been done? Without an operation the subject must die very soon. Without an anæsthetic, the operation was utterly unjustifiable. Of anæsthetics,

ether was conventionally confessed the safest; the material used, the purest recognized; the administrator skilled and accustomed to the duty; the quantity used, no more than sufficient for the object in view; the vehicle of the most approved form—yet the finale, lamentably sad!

I add the memorandum report given me by the gentleman who administered the ether. "Mrs. McNeill inhaled the ether without resistance, and without any disturbance of respiration. It was twelve or fifteen minutes from the beginning of the use of the ether before she was sufficiently anæsthetized to commence the operation. The pulse was at this time stronger than before beginning with the ether, and it was regular. After the operation had been begun, I would withdraw the ether, until its effect would begin to pass away, and then renew it, when but few inhalations would be necessary to bring her fully under its influence. When the operation had been continued about twenty-five minutes, the pulsation in the radial and temporal arteries ceased, which had been continually failing since the beginning of the operation, with pallor gradually coming on. The respiration was good up to this time. When I noticed that the pulsation in the arteries was about to cease, I stopped administering ether, and gave a drachm of brandy and water (equal parts) hypodermically; her head was lowered and she soon revived sufficiently to speak and move her limbs. Then the operation was proceeded with, but without using more ether. In a few minutes she vomited, after which it was seen that she was sinking; and again her head was lowered and the brandy and water used hypodermically (about four drachms), also one drachm of aromatic spirits of ammonia; about eight ounces of Squibb's washed ether were used, but much of it was wasted. About five drachms of brandy and water were used hypodermically and one drachm of spirits of ammonia."

ART. VI.—*Rachiotomy in Transverse Presentations.* By ALFRED G. TEBAULT, M. D., Ex-President of the Medical Society of Virginia, etc., London Bridge, Va.

My friend, Dr. G. McDonald, of West Virginia, deserves thanks for having presented the important subject of "instrumental labor" as the one for discussion at the next annual session of the Medical Society of Virginia. On that occasion, it is to be hoped, the aggregate experience of the members will be brought into requisition, and an amount of information accumulated of great value in obstetric practice. I now propose, without presumption, to contribute some brief remarks, based upon

recent experience in the management of cross presentations requiring the aid of surgery.

In the *Virginia Medical Monthly*, Vol. II, page 237, I had the honor to publish the first case (so far as my knowledge extends) of successful and speedy delivery in arm presentation by the simple division of the vertebral column of a dead fœtus at the full term of utero-gestation. In the record of that case this sentence occurs: "I am not prepared to say whether this operation would have been as successful in a reversed position of the shoulder—that is when the fœtal palm is turned forward—though I see no valid objection to its applicability, provided always, that the division is well effected and the parts properly controlled in the subsequent steps." Since then I have met such a case, in which the operation as devised, has proved quite as expeditious for safe delivery, and this, I conceive, renders its publication an imperative duty.

The operation of rachiotomy, which I employ as a last resort in transverse presentations, in lieu of exvisceration, or decapitation, when version is injudicious or impracticable, and the infant dead, recommends itself on account of its simplicity, great expedition and little risk to the parent; and while it should not be expected that any one operation will meet the exigencies of all cases of this class, yet it is amply demonstrated to my mind that this, when employed with skill, is an important addition to our resources.

At an early stage of shoulder or arm presentation, the rule should always be to attempt podalic version; but all accoucheurs admit that when the membranes have burst and the liquor amnii evacuated, the operation of turning is both difficult and dangerous. Though it becomes a source of great suffering, if no more, to the mother, and of hazard to the life of the fœtus, still under the use of chloroform, opium and other relaxing means, it may yet prove successful when performed with due caution and masterly manipulations.

But, to the misfortune of the general practitioner, he is often called in late, and on his arrival may find the woman in a state of extreme exhaustion, with the addition of other embarrassing circumstances, such as a narrow pelvis, impaction of the fœtus, a disproportionate size of the child or threatened rupture of the

uterus. Thus situated, he is apt to be urged to perform one of the most difficult operations in obstetric surgery—one, too, of fearful risk to the mother. To obviate this necessity by the substitution of another operation of easy performance and little danger, is clearly to the interest of the profession and humanity. Leaving these cursory remarks I proceed to the main subject of this communication.

Case.—*March* 11, 1877. Called in consultation by my friend, Dr. James P. Wright, to attend Lucy ———, æt. about 26 or 28 years, who had been in labor for about fifteen hours. This was her third labor; the two previous ones were represented as difficult; the breech or lower extremities had presented in each instance; it was believed a deformity of the pelvis existed by which its antero-posterior diameter was shortened. Learned that labor had commenced about 5 P. M. on yesterday, and very soon after the liquor amnii had been discharged. From that time till the present, the pains had continued rapid and violent. The attending physician who had been called over night, immediately recognized an arm presentation; but finding great difficulty in passing his hand into the vagina owing to the contracted state of the soft parts, while alarming symptoms of exhaustion began to manifest themselves, concluded to send for me.

Her countenance was sunk and altered; pulse rapid and feeble at times, at others slow and failing; coldness of surface; respiration much oppressed, with occasional gaspings; the bowels and bladder had been evacuated recently. The abdomen was quite large and prominent; she was reported to have reached the full term of utero gestation, but had not felt the movements of the fœtus for some days. The expulsive efforts still continued with short intervals.

On examination, the left hand of the fœtus was found exterior to the vulva, with its palm turned towards the pubes. The vagina was so contracted and undilatable, blocked up as it was by the fœtal arm and some coils of pulseless umbilical cord, as to present much difficulty to the satisfactory exploration of the parts. It was evident, however, that the cervix of the uterus had been pushed low and that the os, thickened and œdematous, grasped the arm of the fœtus. The introduction of the operator's hand was deemed unadvisable at this time on account of the parturient efforts which were excited by the least attempt at examination, however carefully made. The only indications, then, called for the administration of diffusible stimuli and opiates. These judiciously exhibited by Dr. Wright, had the effect to im-

prove the pulse and general condition of the patient, while periods of comparative quiescence intervened between the pains.

After waiting awhile, we decided to attempt delivery by podalic version, and as the soft parts were still rigid and unyielding, chloroform was administered, both for the purpose of relaxation and to avoid shock to the system. But its use was attended by the return of alarming exhaustion, and diffusible stimuli became our reliance for the time.

When a sufficient reaction had been ensured, I suggested the use of gelseminum. Five or six doses of about three drops each of the fluid extract were followed by, if they did not cause, a marked relaxation, sufficient to allow the operator's hand to pass within the vulva; and through the os uteri the finger reached up to the axilla of the child. The least attempt to pass beyond was clearly impossible, owing to the persistent contraction of the uterus upon the child pressing it forcibly within the brim of the pelvis, together with the excessive irritability of the uterine fibres induced by the touch. Though the os was dilatable, its tumid and œdematous condition which extended also to the cervix, rendered the maternal parts much in the way. These, however, tightened with each throe so that much care and patience had to be employed in assisting the dilitation. The arm of the child was much tumefied and somewhat livid; coils of the funis surrounded it, while several loops passed out into the vagina.

About sundown the exhaustion of the parturient became so urgent and imminent that a cessation of uterine efforts was threatened; it was then evident that delivery could no longer be postponed. By this time one or two ribs could be felt, and in further exploration the clavicle and acromion process of the infant. To proceed further with the hand was still impossible, both on account of the narrow space yielded by the soft passages and their contents, and the immoveable pressure of the fœtus within the brim of the pelvis which admitted of no attempt to insinuate the fingers by the side of the fœtal body or to lift it up in the least degree.

In this extremity we decided to essay the perforator at the axilla of the fœtus, though the space to be operated on was very limited, and the operation, for many reasons, difficult, and chiefly for the fear of wounding the maternal parts.

The perforation being effected, I proceeded through the narrow space to extract a portion of the lungs. In doing this, it was necessary to make gentle traction, with the arm of the child in the direction of the superior axis, assisted at times by the crotchet. In this way the shoulder descended almost within sight. The traction was then changed to correspond with the

axis of the inferior strait when the dorsal vertebræ, presenting an unyielding arch from left to right, was easily reached.

Instantly seizing the favorable opportunity, I introduced within my right hand the large blade of a common pocket-knife to a point a little below the right scapula of the infant, passed in with its thorax and, cutting from right to left, severed the spinal column and its adjoining soft parts.

The same mechanism now occurred as in the case formerly reported. The lower fragment of the vertebral column immediately moved forward and outward, while the breech passed along the right sacro-iliac synchondrosis, and in its further progress turned into the hollow of the sacrum and presented the left hip at the fourchette. With slight manual assistance, the breech was brought out and the remaining evolutions were easily accomplished.

I suppose the operation of perforating the thorax lasted about five minutes, but while the vertebral arch offered in itself an insuperable obstacle, complete delivery was effected by its division in less than one minute. The placenta came away at once, already detached, and partially macerated.

In this case the spine was reached by a gentle traction of the presented part, assisted by the maternal efforts which fortunately continued throughout the operation, and perhaps also by the slight diminution of the thoracic cavity. Due reflection since has convinced me that I could have accomplished the delivery without the use of the perforator.

To Dr. Wright's judicious measures in sustaining the energies of the patient during the crisis, too much praise cannot be awarded. She has recovered under his treatment without any untoward symptom.

The infant was a female at the full term, and had been dead for several days.

ART. VII.—*Fatal Case of Tetanus, in which Large Doses of Chloral Hydrate, Bromide of Potassium, and Calabar Bean were used.* By J. T. BOUTELLE, M. D., Hampton, Va.

Feb. 26, 1875, Chas. B. a tall, strong, mulatto was brought to my office, having just received a severe injury of the right hand from a circular saw, which had entered on the ulnar side at the metacarpo-phalangeal articulation, and passed through all the joints, severing the fingers from the hand; also sawing through the first phalanx of the thumb, and splintering it badly. The forefinger was held by about one-half its circumference of skin.

Ether was administered, and the middle ring and little fingers removed by a stroke of a scalpel, and the ends of the metacarpal bones shortened to allow flaps to be made. At the urgent request of the patient and his friends, though contrary to my own advice, I made an attempt to save the forefinger, uniting it by sutures to the skin of the hand. I then cut off a projecting fragment of bone from the thumb, and applied a splint to the thumb and finger. The hand was then wrapped in cotton batting, and the arm laid upon a wide splint. After recovering from the anæsthetic, the patient rode home in a wagon. Everything went well for a few days, except the forefinger, which showed signs of mortification, and which was therefore removed under ether on March 4th.

On *March* 9th, the thumb was uniting well, with very little suppuration, and the flaps also doing well, with the exception of the forefinger where the flap was sloughing, and the tissues beneath it unhealthy—the discharge being dark and offensive. The treatment has been compresses wet with warm water. He has had almost no constitutional disturbance.

March 10. Yesterday evening, he began to have some trouble in opening his jaws, and this morning they are quite stiff. His wife has just recovered from the mumps, but he has no swelling of the parotids. Suffers pain in the breast and general malaise. Applied a flaxseed poultice to wound, and gave ℞. morph. sulph., gr. ¼; potass. bromide, gr. x; aq. ʒij. M. At 5 P. M., the stiffness of jaws was increasing, and he had difficulty in swallowing. Back of neck stiff and sore; pain in chest continues. ℞. Fld. ext. gelsemini, ʒss every three hours.

I was very anxious to try the effect of calabar bean in this case, but there was none in town, and I was obliged to send to Norfolk for it, which took about twenty-four hours.

March 11th, 7 A. M. Has not taken the gelseminum. Tetanic spasms every ten or fifteen minutes—the head being drawn back, arms and legs twitching, muscles of neck rigid, jaws tightly closed. Between the spasms, he can, with great exertion, separate the teeth about a quarter of an inch. Complains of severe pain in the breast, which increases as a spasm comes on. The pectoral and abdominal muscles are also in a tetanic state. Allowed him to inhale chloroform. 10 A. M. Spasms nearly continuous, with now and then a very severe one. Has been inhaling chloroform at intervals since 7 o'clock. At 11.45 A. M. enema of chloral hydrate, gr. xxx, in mucilage. He was then laid in bed; up to this time he has insisted upon sitting up. In about ten minutes after the enema, he was more relaxed and convulsions ceased, but he could not swallow, and the jaws re-

mained stiff. 12 M. Asleep. While he sleeps there is occasional twitching of the facial muscles. Risus sardonicus well marked. 2 P. M. Has been sleeping a good deal since last record, and has had no more convulsions. Pain in chest much relieved, and muscles of jaw seem to be relaxing a little. Pulse 82, strong and steady. This morning skin was cool and covered with clammy sweat, yet he complained greatly of heat. Now skin is hot and moist. 2.20 P. M. Enema of chloral hydrate, gr. xxx. 7.15 P. M. Pulse slow and steady Has had no more convulsions, but muscles of back of neck are still rigid, and jaws stiff. Inhales a little chloroform occasionally, and sleeps most of the time. 7.35 P. M. Enema of chloral hydrate, gr. xxx; this is to be repeated at midnight, and at six to-morrow morning.

March 12th, 9 A. M. Passed a quiet night. This morning, jaws stiffly clenched, head inclined to draw backward in continuous spasm; sterno-mastoid muscles tightly on the stretch. Pain in chest and epigastrium. Has swallowed a few spoonfuls of chicken broth. Pulse 90. Having now obtained a bottle of fluid extract physostigma, omit other medicines. 9.40 A. M. R. Fluid extract physostigma, minims iij (one minim of the extract represented one grain of the bean). 10 A. M. Fluid extract of physostig., minims ij. At 10.20 A. M. Fluid extract physostig., minims ij. About this time, he had a convulsion, not very severe. During a paroxysm, he groans loudly, and wants breast rubbed violently. He insists upon being fanned continually, and this fanning seems to give him some relief and does not appear to bring on a convulsion. 10.35 A. M. Pulse 90, strong, steady. Can swallow, and asks for milk, which was given. No marked action of the drug yet noticed. 10.45. R. Fluid extract of physostig., minims ij. After this, I went away, directing the attendant to give him two minims of the extract every twenty minutes. 1.40 P. M. Has now taken, in the past four hours, twenty-three minims of the extract. Has paroxysms every ten or fifteen minutes, not as severe as those of this morning. Pulse 96, steady. Has taken several tablespoonfuls of milk. 2.40 P. M. Has taken 12 minims more of the extract. An enema of soapsuds has been given, and returned with but little fœcal matter. Passes water freely. Is pretty quiet. 3.20 P. M. Has taken 12 minims since last record. Has occasional paroxysms, lasting about half a minute. I now leave, with orders to give three minims every twenty minutes. 7.20 P. M. Has been having frequent and violent spasms. The room is very hot and close. The medicine has not been given as ordered, and he has taken but six minims during the past four hours. Room was aired and the patient got up with the help

of assistants and sat upon chamber. No fœcal discharge. Passed water freely. Muscles in a state of tonic contraction, and he was got back in bed with some difficulty. I then gave him seven minims of the extract. Between 7.40 P. M. and 9.10 P. M., he took 30 minims more. 9.40 P. M., gave six minims. With a little force, I can just get the end of the spoon between his teeth. Thirty minutes later, on consultation with Dr. G. Wm. Semple, we decided to administer the drug by subcutaneous injection, and four minims were injected into the deltoid muscle. At 10.40 P. M., four minims more were injected. He has now taken in the past thirteen hours, by the mouth, 96 minims, and by subcutaneous injection, eight minims, equal to 104 grains of the bean. I now leave, with orders to give five minims every twenty minutes.

March 13th, 10 A. M. After I left last night, he grew gradually worse, the paroxysms becoming more frequent and violent. The medicine was not given, as the attendants said he could not swallow. At 2 A. M., by my direction, he had inhaled some chloroform, and an enema of chloral hydrate, gr. xxx had been given. This morning, paroxysms occur every ten or fifteen minutes, not lasting long, but very severe, the head and shoulders being drawn back, body arched and rigid, arms and legs twitching violently. Respiration is jerky; muscles of back of neck continually contracted. The wound is looking dark and unhealthy. 10.40 A. M. Hypodermic injection of extract physostigma, minims xij. 11 A. M. Enema of chicken broth. The contraction of muscles is now almost without intermission. Respiration spasmodic. 11.20 A. M. Hypodermic injection of extract physostigma, minims x. After this, he expressed himself as feeling easier. He is perfectly conscious, and gives directions to attendants concerning his comfort. Pulse 120. Clonic contraction of the muscles continues; the abdominal and sternomastoid muscles also twitching. 11.45 A. M. As the calabar bean treatment seems to produce no good effect, and the respiration is becoming jerky and labored, I decided to abandon the extract of physostigma and return to chloral hydrate, with the addition of bromide of potassium. Enema of potassium bromide, ʒj in mucilage. 12 M. Tried to give some toddy by the mouth, but he could not swallow. It seemed to be rejected by a spasm on reaching the pharynx. 12.50 P. M. Enema of chloral hydrate, ʒj in mucilage. After this, he was much more quiet, and the twitching of muscles much less. I then went away, directing enema of potass. bromide, ʒj to be given at 2 P. M. 3 P. M. Much easier; now and then a severe spasm lasting about a minute. Has slept a good deal, and the attendants state that

he has opened his jaws more than a half an inch. Pulse 130, getting rather weak. 3.25 P. M. Enema of chloral hydrate, gr. xxx. 4.45 P. M. Lies very quiet, with occasional twitching of muscles. Sleeps nearly all the time, except when waked by a spasm, and these do not last long. Can separate the front teeth about half an inch, and can swallow. Pulse 104, stronger and steady. 5.15 P. M. Enema of potass. bromide, ʒj in mucilage. Chicken broth given in small quantities frequently. 6.30 P. M. Enema of chloral hydrate, gr. xxx. 8.30 P. M. Spasms less frequent and less severe. The lower jaw is relaxed, hanging down so that front teeth are half an inch apart. Every five or ten minutes, he has a short spasm, straightening himself out rigidly and asking to be lifted up. Pulse 120, and weak. Respiration spasmodic. Has swallowed a few spoonfuls of broth. From this time until morning, he remained about the same as just recorded, having occasional short spasms, and sleeping most of the time in the intervals. An enema of chicken broth was given during the night, two enemata of chloral hydrate of fifteen grains each, and one of potass. bromide, gr. xxx. The pulse and respiration gradually grew weaker. His strength failed and the spasms continued to occur about every ten minutes, though not severe, and he died at 7 A. M. *March* 14th.

The principal point of interest in the above details, lies in the illustration of the comparative beneficial effects of the remedies, at least, so far as a single case can illustrate anything. A brief synopsis may serve to make this prominent. We may divide the attack as regards medicinal treatment into four periods, viz:

First Period.—Duration, March 10th to 11.45 A. M. March 11th. No systematic treatment. Fluid extract gelseminum was ordered, but not given.

Second Period.—Duration, 11.45 A. M. of March 11th, to 9.40 A. M. of March 12th. Chloral hydrate. Five enemata of 30 grains each, at intervals of three to five hours.

Third Period.—Duration, 13 hours, 9.40 A. M. to 10.40 P. M., March 12th. Calabar Bean. 96 minims of the fluid extract physostigma, in divided doses *per orem*, and 8 minims by hypodermic injection.

Fourth Period.—From 10.40 P. M. March 12th, to 7 A. M. March 14th. During the first part of this period, two hypodermic injections of fluid extract physostig., (minims xij and minims x). Bromide of potassium and chloral hydrate by enema, in doses of gr. xv–ʒj, at intervals of about two hours.

During these periods, we find the condition of the patient to be as follows:

1st. Symptoms steadily growing worse, and finally violent convulsions occurring every ten or fifteen minutes. Severe pain below sternum.

2d. After the first dose of chloral, convulsions cease, substernal pain very much relieved. Sleeps. Muscles more relaxed. Although the jaws remained stiff and muscles of back of neck rigid, yet, during all this period, no convulsion occurred, and he was comparatively comfortable.

3d. Convulsions soon return, and in a few hours, occur every ten or fifteen minutes. Patient grows weaker, respiration difficult and spasmodic. After 104 minims of the fluid extract physostigma (104 grains of the bean), had been given, the paroxysms became so violent that an enema of chloral hydrate was given.

4th. At first unable to swallow. No effect from an enema of bromide of potassium (℥j). Then after an enema of chloral (℥j) he became much easier. Was soon able to swallow milk and broth. Convulsions occurred at intervals, but much less severe than the former ones. Slept a great deal, and though he gradually sank and died, yet he was much more quiet and free from pain than during the preceding period.

From this, it is safe to say, that chloral hydrate was the only drug which produced any marked relief to the symptoms. I certainly expected to perceive some remedial action from the calabar bean, and was much disappointed at its failure. Of course it is possible that the strength of the preparation was not what it purported to be. I made no experiments directly in regard to this point, but it is proper to state that some of this specimen acted wonderfully well in checking epileptiform convulsions, in two cases where bromide of potassium had little, if any effect; and from this fact, I was led to consider the preparation by no means inert.

Goa Powder.--Dr. H. R. Crocker, in a recent number of the *London Lancet*, gives the following results of his use of Poh de Bahia: All of 9 cases of tinia circinata in various parts of the body were cured in a week or ten days—a single application being sufficient to some. In 20 cases of tinea tonsurans, results were not so satisfactory. One was cured in six weeks; another in two months; no improvement in 7 cases; remaining 11 cases slightly improved.

Clinical Reports.

A Large Foreign Body in the Eye. By JOHN W. DILLARD, M. D., Riverville, Va.

Lindsey G. (colored), a hale, vigorous young man, turned 19 years of age, was firing a "Spencer rifle," which exploded at the same time that its contents were discharged. He staggered and fell, having been struck by a portion of the exploded rifle; but did not lose his consciousness; he was soon lifted up, and walked one and a half miles home, where I saw him immediately. Upon examination, it was found that the wound, which commenced at the internal canthus of the left eye, had divided the orbicularis muscle, and exposed the facial surface of the superior maxilla for about an inch. There was also a crescentic shaped slit in the centre of the cornea, through which a part of the aqueous humor had escaped. Thinking that a foreign body had entered the organ through the corneal wound, I carefully examined it, but found nothing. The edges of the facial wound were brought together and held in position by a few interrupted sutures. The eye was treated by the application of a drop of castor oil to the cornea; the lids were closed by a compress, and cold water dressings were used. The eye-lids soon became very œdematous and prevented any further examination of the eye for eight days. Nine days afterwards, the entire cornea sloughed, and the man complained of pain in the eye, with which he had not before been troubled. Examination now revealed a metalic speck, situated in the posterior chamber, which I removed, but with some difficulty, as it was rough and tubular in contour. The piece of gun measured, after its removal from the eye, $1\frac{3}{8}$ inches in length, $\frac{1}{2}$ inch in diameter, $\frac{1}{8}$ inch in thickness, and weighed one drachm and two scruples. This piece of steel remained in the eye for 17 days. It has now been three months since the accident, without a symptom of sympathetic ophthalmia.

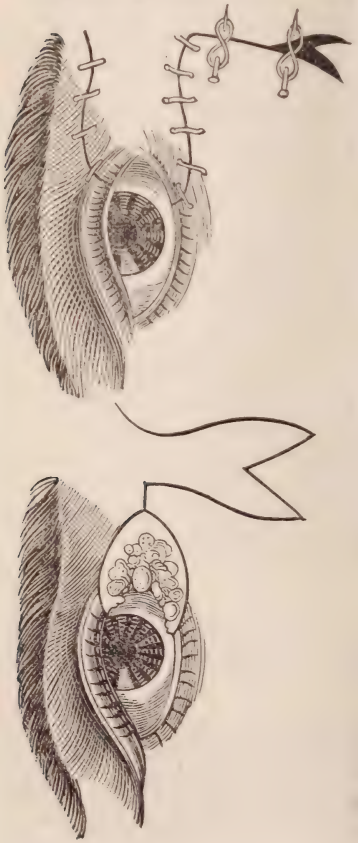
Case of Blepharo-Plasty [with Wood-cut Illustration]. By GEO. REULING, M. D., Surgeon to Maryland Eye and Ear Institute, Baltimore.

Mrs. W., a woman, aged about 52, suffered during a period of ten years, with a stenosis of the left lachrymal duct, which, finally, led to epithelioma of the caruncula lachrymalis, as well as the inner commissure of both eye-lids. In this state of the

disease I first saw her about nine months ago, and strongly advised the removal of the diseased parts, either by means of the actual cautery or by the knife. Circumstances, however, prevented her from having the operation performed at the time—she being compelled to remain constantly, during a period of four months, at the bedside of her son, who finally died in the last stage of tuberculosis pulmonum.

During this time, the lids became considerably infiltrated, and when I again saw the patient, in the month of January, 1877, nearly one-half of each lid, including the skin between the inner commissure and nose had been utterly destroyed. The lancinating pains through the diseased parts, especially the eye and the region of the lachrymal sac, were intense, keeping the sufferer awake during several hours every night.

On probing, I found the os unguis covered by hard but easily bleeding granulations; the lachrymal sac, which contained a sero-purulent liquid, showed considerable thickness of its carcinomatous walls, and was laid open by an ulcer of the size of a small bean.



On examination under the microscope, large epithelial cells, in rapid division of their nuclei and fatty detritus, were found.

The operation consisted in the total removal of the affected skin, as well as the lachrymal caruncle, the lachrymal sac, and the os unguis beneath it. I then proceeded to cover up the semilunar defect by a flap from the nose, as depicted in the accompanying diagram.

The wound healed partly by healthy granulations and partly by the first intention, and the operation has proven perfectly successful, inasmuch as, having been performed entirely within the region of healthy tissue, the

disease has been eradicated, the agonizing pains have ceased, and the artificial eyelids vastly improve the appearance of the patient.

Cataract Extraction—Iridectomy. By HUGH M. TAYLOR, M. D., Assistant Demonstrator of Anatomy in the Medical College of Virginia, Richmond, Va.

Jane Johnson, æt. about seventy, with history of cataract of several years' duration, was put under my care a few months ago. The right eye had been operated on by extraction. The operation was followed, however, by much vomiting, causing prolapse of the iris, with displacement and closure of the pupil. Sight was now entirely gone in both eyes, and surgical aid was called for.

Drs. Wheat and Nicholson, assisting me, chloroform was administered, the lids were held apart by a stop speculum, and the eye fixed with serated forseps. The usual corneal-section, with Beer's triangular knife, was made. The speculum was removed and retractors substituted, the capsule was divided, and the lens removed without trouble.

The pupil remained central, but was entirely filled with the opaque capsule. As I had lately had an opportunity of observing the extreme slowness and uncertainty of the absorption of this opaque matter in an old case like this, and as I was sure, if left behind, it would be washed into the anterior chamber and would increase the danger of iritis, more than an operation for its removal, I determined to make the effort to get it away by using two needles simultaneously, one being made to form a fixed point of resistance upon which the other could act, I succeeded, without making undue traction on the ciliary or suspensory ligament, and without, as was afterwards shown, much additional injury to the iris, in lacerating the capsular membranes, and in clearing them from the pupil.

Thinking the right eye also offered a fair chance for optical, as well as surgical success, I determined to give her the benefit of an iridectomy. The operation, as performed, differed slightly in its details from that usually adopted.

When operating upon the right eye, as in this case, the surgeon should stand behind the patient's head; and with his left hand, introduce through the cornea on the nasal side, an ordinary curved couching needle into the anterior chamber. The needle should be carried on until its point is over the part of the iris to be excised, when, by elevating the handle, a fold can be

hooked up on its point varying in size with the necessity of the case. The next step in the operation is with the right hand to carry the lancet-shaped iridectomy knife through the cornea on the temporal side into the anterior chamber. Through this section a pair of angular curved scissors, should be passed with the convexity carried forwards until it rests on the fold of the iris. Now, by opening the blades of the scissors and depressing the handle of the needle the fold can be raised up between the blades and easily cut off.

It is a point of some importance to prevent the escape of the aqueous humor until after the fold of the iris is caught up; for as soon as the fluid escapes, the cornea becomes flacid, and the iris falls forwards, diminishing the size of the anterior chamber, which renders the needle much harder to guide. To avoid this, the needle should be introduced through the cornea so as to form a valvular opening, and before the section on the temporal side is made.

The comparative simplicity of this method, and the success attending the operation in this case, entitles it, I think, to consideration. It seems to me much easier to pull the iris forwards than to drag it sideways through the corneal section to be cut off outside. This endangers the whole eye by frequently tearing the iris, rupturing the ciliary and suspensory ligament and hyaloid membranes, and allowing the vitrious humor to escape. The danger of prolapse is slight; for while transfixed in this way by the needle, the iris is under control, and cannot be washed out by the aqueous humor when it escapes. The diminished dangers of hæmorrhage, atrophy, and iritis, in consequence of the less amount of displacement and necessary manipulation, are no less prominent in recommending the operation. By it, we can secure all of the advantage, in the way of safety, which recommends the usual operation. At the same time, we attain by the operation above described, that great desideratum, a central and movable pupil; and certainly, in most cases, we can avoid that great bugbear, a prolapsed iris.

(1.) *Case of Complete Uterine Inversion.* (2.) *Case of Difficult Version.* By WALKER A. HAWES, M. D., New York City.

(1.) *August 15th*, 1872. Was called by midwife to see Mrs. H. On entering patient's apartment found her blanched, and the midwife called out, "Doctor, the child is born, and here is something that I cannot get away that looks like the head of another child," at the same time directing my attention to an object between the patient's thighs about the size of a baby's head at term. I immediately recognized the mass to be the inverted uterus. The patient's pulse was very weak and rapid, and she looked like one who had lost a great deal of blood, but from the quantity that I saw I should not say that she had lost more than is generally done in labor. The placenta was completely detached from the uterus, but the membranes had been caught between the cervix uteri and the vaginal labiæ and prevented the placenta from being entirely removed. After separating the membranes, I grasped the uterus in the palm of the left hand and pushed it up until it passed into the vagina, when forming my fingers into a cone, I attempted to push the body through the os; but owing to the great pain and bearing down of the woman, I was unable to advance it at all. So I left the patient in the care of the midwife and ran to the drug store, about 500 yards off, and securing some ether, returned and placed the patient well under its effects. I then resumed my attempt to pass the body of the uterus through the os; and although the patient began to vomit as soon as the uterus was pressed against, I succeeded with very little force in completely replacing it. I then gave her an ounce of brandy with f℥j of Squibb's extract of ergot, and applied a bandage firmly to the abdomen. The patient recovered without the least untoward symptom, and by the ninth day was up and about the room—the ninth being the customary day, in this city, for tenement house cases to leave their beds for good.

The account given by the midwife was that the patient was on her knees when a hard pain came on and expelled the child, after which she tied the cord and placed the patient in bed, when she discovered the state of things above described. How much reliance is to be put in the statement it is impossible to say.

(2.) *July 12th*, 1874. I was called by a midwife to see Mrs. W., who had been in labor for several hours, with a left shoulder presentation. The waters had escaped early in the labor. The promontory of the sacrum projected a good deal. I placed the patient under chloroform and with the assistance of the midwife

began version. After much trouble I managed to get the feet down and the hips delivered, when the head hung at the superior strait, and it was with the greatest difficulty that I succeeded in dislodging it and delivering the shoulders—the midwife being directed to press the head forcibly downwards, while I pulled, as each pain came on. After the shoulders were delivered, the head seemed as if held in a vice. After fruitless efforts for about an hour to deliver the head by pulling well down and back, then elevating the body and inserting two fingers of my right hand into the child's mouth and exerting all my strength, whilst the midwife pressed the head downwards from above the pelvis, I concluded, as my strength was exhausted, to secure a pair of forceps and attempt delivery with them. I went to a medical friend near by and secured his forceps, (he being out, his services could not be obtained). On my return I found patient in same condition as when I left. After several efforts to apply the forceps and failing, owing to the head being so tightly clasped that I could not get my fingers by its side, so as to guide the blades, I threw them aside and made another effort to deliver by putting the fingers in the mouth and elevating the child's body to a right angle with the patient's abdomen; and using all my strength in pulling, while the midwife pressed forcibly downwards, succeeded in completing the delivery.

The patient was under chloroform to complete anæsthesia for an hour and a half, and seemed much exhausted. Labor was completed about 3 P. M. A messenger came about 8 P. M. and said he wished to have the woman's husband arrested, as he had come in drunk shortly after I left, and, with a knife in his hand, had made his wife jump out of bed and run into a neighbor's room living on the same floor. On my visit the next morning I found her occupying her neighbor's room, and feeling unusually well, even for an uncomplicated labor. By the fourth day she was up and well, never having had the least unfavorable symptom.

The above cases are more remarkable for absence of any local or constitutional trouble than for anything else.

A Case of Triple Birth. Reported by B. G. McPHAIL, M. D., U. S. Army, Post Surg'n at Ft. Fred. Steele, Wyoming—from Notes furnished by DR. T. M. SMITH, Rawlins, Wyo.

Mrs. A., aged 27 years, dark complexion, black hair and eyes, healthy and weighing 150 pounds, was taken in her third labor during the night of July 31st, 1876. Dr. Smith was called at

7 A. M.; found patient in bed; os uteri dilated to the size of a silver quarter; pains about 8 minutes apart, and head presenting.

About 9 o'clock the waters broke, and in ten minutes the first child was born. On making an examination another head in an unbroken bag of waters was discovered, and the second child was delivered in fifteen minutes. A further examination revealed the *feet* of a third baby, without the bag of waters. This child, a boy, was delivered about 10 o'clock, *dead, and in a partially decomposed condition*. The placentæ, three in number, were expelled at intervals of a few minutes. The uterus contracted strongly; no hemorrhage ensued and recovery was rapid.

The children (two boys and one girl) weighed 13½ pounds at the time of birth; and now the surviving boy weighs 14 and the girl 13 pounds, and both in excellent health.

Correspondence.

Medical Association of Alabama.

Dear Doctor,—The Medical Association of the State of Alabama assembled at Birmingham, Jefferson Co., Tuesday, April 10th.

Dr. J. W. Sears, on behalf of Jefferson Co. Medical. Society, delivered the address of welcome.

In his annual address, the President, Dr. E. D. McDaniel, of Camden, Wilcox Co., stated what the Association had accomplished and what it was necessary for it to effect. Among other things, he said that the Association, since its re-organization in 1868, had promoted the formation of local and county societies, that it had framed and adopted a constitution which was a just object of pride and admiration; that it had been the means of establishing a State Board of Health, and that it had secured the passage, by the State Legislature, of an act to regulate the practice of medicine. It remained for the Association to insist upon a high standard of medical education, and to secure legislative enactments to prevent the spread of syphilis.

The orator, Dr. E. H. Fournier of Mobile, delivered an able and acceptable address on "The Uses and Abuses of Alcohol."

Among papers read at the meeting were "A Biographical sketch of J. C. Nott M. D." by W. H. Anderson M. D. of Mobile; "Yellow-fever, in relation to its cause," by Jerome Cochran M. D. of Mobile; "Prevention of Syphilis," by J. S. Wetherly M. D of Montgomery; "Infantile Diarrrhœa," by M. H. Jordan M. D.,of Birmingham; "Report of two cases of Lightning Stroke," by L. E. Starr, M. D., of Bibb Co.

The report of the Board of Censor was read by Jerome Cochran M. D., Senior Censor, and principal author. It was characterized by

thoroughness, accuracy and indefatigable industry, traits for which Dr. Cochran is pre-eminently distinguished.

Drs. Ro. Battey, Georgia, and S. W. Vaughan, delegate from Arkansas Medical Society, were present, and were invited to participate in the deliberations.

The recent flood, which seriously damaged so many of the Railroads in our State, prevented a great many from being present, while quite a number of others were unavoidably kept away. As it was, there were forty counsellors and delegates present.

The superintendent of S. and N. Railroad took the Association on an excursion to the iron works at Oxmoor. Many of us, who have born and raised in the State, had the most inadequate conception of the mineral wealth and resources which we possess, until this visit. Iron, coal, lime and marble are found here in the greatest profusion.

On account of a want of time, the Association was compelled to decline an invitation to an excursion to Blount Springs, one of the best watering places in the South.

The banquet, given at the Relay House, by the Jefferson Co. Med. Society was elegant and recherché.

The Association was particularly fortunate in its selection of officers for the ensuing year. The personal character and professional attainments of Dr. Peter Bryce, of the Insane Hopital at Tuskaloosa, render him pre-eminently qualified for the duties of President.

Dr. B. H. Riggs, of Selma, who has been the able and efficient secretary of the Association for the past four years, was elected orator, and all who know him will expect a rare treat at the next meeting.

Our meeting was entirely harmonious, not a single incident occurring to produce the slightest discord; and our delegation returned with the most pleasant recollection of Birmingham and a high appreciation of the hospitality of its people.

Your friend,

Selma, Ala., April 18, 1877. JOHN P. FURNISS, M. D.

Proceedings of Societies.

RICHMOND ACADEMY OF MEDICINE.

Nov. 7, 1876. **Patronage of Pharmacists.**—Upon presentation by Dr. C. Tompkins, it was resolved that where it can be done with propriety, the members of the Academy will patronize members of the Richmond Pharmaceutical Association.

Unsuspected Glycosuria.—Dr. J. B. McCaw, in examining the urine of a gentleman who was applying for life insurance, and whom the Doctor had often before examined and thought healthy, was surprised to find a specific gravity of 1057 with great glycosuria. The patient had lost no flesh, and was apparently in good health at

the time. Under dietetic treatment, the register fell to 1037, and the glycosuria was greatly diminished.

Jan. 2, 1877. **Green Urine.**—Dr. J. S. Wellford exhibited a specimen, which he was satisfied was not due to any drug, but to some pathological change causing great waste of tissue.

Dr. W. W. Parker had a patient who once passed green urine, but it also contained blood.

One of Dr. J. N. Upshur's patients once took an overdose of iodide potassium, and a few hours later passed green urine freely.

Feb. 6. **Library of the Medical Society of Virginia.**—Dr. Edwards, as Secretary of the State Society, said he had a number of volumes of Transactions of other Societies, and with the approval of the Chairman of the Executive Committee (Dr. Parker), he had decided to place them in cases in the Hall of the Academy. Suggestion accepted, and special book case ordered by Academy.

Feb. 20. **Tinctura Ferri Chloridi for Erysipelas.**—Dr. E. T. Robinson called attention to the article of Mr. Bell, recently republished in *Braithwaite's Retrospect.* With the tincture made by the old formula, of the British Pharmacopœia (prior to 1860), Mr. Bell had been very successful in the treatment of erysipelas, whereas failures were frequent when resort was had to the preparation made by the formula of the present Pharmacopœia.

Dr. R. T. Coleman thinks that tincture of iron, as we find it now in the drug stores, is of undoubted value for cutaneous erysipelas. But in phlegmonous erysipelas, his best results have come from the use of blisters, and free incisions into the cellular tissue, if the blisters have not been used in time to save the cellular tissue.

Dr. W. W. Parker during the past twenty years has treated about 125 cases of erysipelas with excellent success by the use of the tincture of muriate of iron of the shops. In only five or six cases in which this agent did not appear to do good, carbonate of iron effected cures.

Dr. George Ross said he was now treating a case of phlegmonous erysipelas, in which tincture of iron did no good whatever.

Large Dose of Morphia.—Dr. M. L. James reported the case of a woman at the Alms House who, because of the acquired opium habit, now requires *twenty-six grains* of sulphate of morphia *hypodermically* to induce sleep. She began the use of morphia four years ago.

Cure of Opium Habit.—Dr. Parker has now under his care a woman who used to take a drachm or more of morphia per week; but now she does not take a drachm in a month. He believes the opium habit can be cured in two or three weeks. For the case under treatment, he commenced by giving twenty grains of chloral-hydrate every four hours, and a constantly diminishing dose of morphia—the doses of chloral being also lessened, and the intervals lengthened.

Salicylic Acid and Salicin in Acute Rheumatism.—Dr. J. S. Wellford's usual prescription is a solution of sixteen grains sali-

cylic acid in one fluid ounce of solution of acetate of ammonia. Dose, one half ounce every three hours.

Dr. Fairfax has had two successful results from the use of fifteen grains doses of salicin every two hours.

Blepharo-Spasm.—Dr. Edwards reported a case of this trouble of the eyelids which resisted treatment by any of the bromides, arsenic, calabar bean, amyl-nitrite, blisters over temples, or eletricity. Patient, girl 11 years old. Cause unknown, unless nervous temperament. No intestinal irritation, or brain trouble, or other affection of eye. The blepharo-spasm has lasted a year. Information wanted.

March 6. **Metastasis of Mumps to Testicles** in a child one year old. Dr. O. Fairfax reported the case. During the fifty years in which he had been in practice he had never before seen a case of metastasis to the testicles in a child so young.

Puerperal Convulsions.—Dr. J. S. Wellford mentioned a case. The child, born during one of the convulsions, itself had convulsions when a year old without apparent cause. Are children born during convulsions in the mother more apt than other children to have convulsions?

Dr. R. T. Coleman said he does not lose more than one mother in 16 or 18 cases of convulsions, since he has resorted to bleeding as the remedy. Under the opium treatment the mortality was about 50 per cent.

Dr. L. S. Joynes referred to the success, reported in the journals, credited to the use of veratrum viride.

Dr. Fairfax recently had a case of eclampsia in which veratrum acted charmingly. He believes tolerance of medicine during sickness an indication of its need.

Dr. F. B. Watkins, if he could get chloroform and veratrum, would hesitate a long while before resorting to the lancet.

Dr. W. W. Parker, as much as he valued chloroform and veratrum as adjuvants, would not give up the lancet.

March 20. **Dislocation of Thumb** in a child six months old was the subject of a brief report by Dr. L. S. Joynes. It was difficult to keep the dislocation reduced except by splints and bandages.

Mr. Hugh Blair and Mr. T. Roberts Baker, Pharmacists, &c., of this city, being present, were invited to participate in the discussions. Mr. Baker read the following papers:

Hydrobromic Acid.—This acid has lately been brought to the notice of the profession, in an article published in the *London Med. Record* by Dr. Fothergill. He says of it, that it has the ordinary properties as well as the peculiar properties of bromide of potassium. In forms of excited action of the heart, connected with general nervous excitability, it is most useful. Given with quinine, of which it is a most excellent solvent, and digitalis, it gives better results than either of them alone. In cases of gastric irritability, it is the most useful of all acids, possessing the usual properties of acids generally, and of the bromide as well. It has the additional advantage of not

producing the troublesome eruption so often the result of bromide of potassium. The usual dose is half a teaspoonful; full dose a whole teaspoonful. He says it certainly does prevent the recurrence of headache after each dose of quinine in those who before had to abandon the use of quinine in consequence of that trouble. It also prevents the sensation of fulness in the head, felt by some persons after taking iron.* He found it very useful in cough mixtures, and a valuable remedy in whooping cough, and gives the following formula for a cough mixture:

℞	Spts. Chloroformi,	♏xx
	Acid Hydrobromic,	ʒss
	Syr. Scillæ,	ʒj
	Aqua Distil,	ad ℥j

♏ Dose, Teaspoonful three times a day.

Dr. Fothergill says the action of the acid (hydrobromic) from the effect of the bromine upon the reflex mechanism allays the cough often so troublesome. It possesses much the same effect as opium without the bad effects upon the digestive organs or the bronchial secretion.

Grindelia Robusta.—At the meeting of the American Pharmaceutical Association in Boston, Sept., 1875, Mr. James G. Steele, of San Francisco, read a paper on this plant, and presented specimens and some preparations made from it. The plant is a native of California, and is described as a tall, stout, perennial, and looks like a sun flower. It grows from one to three feet in height, and has bright yellow flowers, in heads from one to two inches in diameter. Just before the flowering season the unexpanded heads or buds, secrete a quantity of resinous matter; and after the flowers mature, this resinous matter is distributed all over the flowers, leaves and stalks. The plant is most robust and succulent when growing in damp localities. The active remedial principle is supposed to reside in this resinous substance.

Mr. Steele speaks of its marvellous efficacy in curing the eruption of poison oak and in suppressing asthma. The late Dr. C. C. Caufield, of Monterey, California, was the first to call attention to the therapeutic action of robusta in cases of poisoning by poison oak. When used as an application for this purpose, the fluid extract is diluted with water, and then cloths, which have been satu-

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*Note by the Editor.—Hydrobromic acid also relieves similar effects of salicylic acid. The suggestion was made by Dr. Dabney in the *Monthly*, (March No., 1877, page 874). The Editor has tested it in his own person. The formula for hydrobromic acid is as follows (taken from Fothergill's *Hand-book of Treatment*, page 569, just issued by Mr. Henry C. Lea, Publisher, Philadelphia):

℞	Tartaric acid,	℥xiij, ʒj, gr. xxxvij
	Potassium bromide,	℥x, ℥vj, gr. xxviij
	Water,	f℥lxxx. ♏

The tartrate of potash falls as a white precipitate, the hydrobromic acid remaining as a clear fluid. Dose, ʒss to ʒj.

rated with this dilution, are applied to the affected parts. The cure is said to be effected very speedily.

But its utility in that distressing disease, asthma, is most worthy of attention. Dr. Q. S. Smith, of Clorendale, Sonoma Co., Cal., reports that he has used this medicine with the most satisfactory results He speaks of one patient, who had suffered from severe and frequent attacks of asthma since childhood, and found no relief from physicians and divers remedies. He commenced taking the extract from one to three times a day for three days, and then only at bedtime for ten days longer. Under this mode of treatment, the attacks became lighter and more remote; and between the attacks he gained in flesh, and his general health improved. More than five months have passed since the patient has felt any symptoms of his old enemy, once the plague and terror of his life. He is now heavier and stronger than ever, and can climb the rugged mountains of his sheep ranch and the surrounding country, looking after stock and hunting game with an agility and endurance unsurpassed by any of his neighbors. Dr. Smith ascribes this happy change entirely to the virtues of the robusta, as the patient took no other medicine.

Mr. Jas. A. Wilkinson, of Virginia, who has until recently been a pharmacist in Illinois, but is now a medical student at the University of Virginia, informed me that, when living in the West, he sent to California and procured some of the plant, of which he made extracts and tinctures. He tried it with a lady who had suffered from infancy with asthma, and who, after taking the medicine four weeks, was entirely free from any asthmatic symptoms, and remained so for a long period, although before that time she had never passed more than a week free from suffering.

Note by the Editor.—Attention was first called to the value of grindelia robusta about 1866, by Dr. W. O. Ayres, of San Francisco, who had used it with marked success in the treatment of asthma. The editor of the *Pacific Medical and Surgical Journal* (Dec. No., 1866) reports the first authenticated cure by the use of this remedy. Dr. W. P. Gibbons, of Alameda, Cal., gives an excellent paper on the subject in the *Trans. Med. Soc.* of California, 1872, pg. 140. Since these publications a great many others have appeared in the journals, especially in the Western journals—all going to confirm in the most emphatic manner, the value of grindelia robusta in *asthma.*

Among other medicinal uses, Dr. H. M. Fiske (*Pacific Med. Jour.*, Aug., 1875), calls special attention to its value in all cases of *iritis*—no matter what the cause, whether gout, rheumatism, scrofula or violence. He administers teaspoonful doses of the fluid extract every fourth hour, and in addition applies over the eye a solution of one part of the fluid extract in four parts of water. In its effects upon the iris, it seems to be almost a specific. Dr. Fiske also claims for it demulcent as well as stimulant properties; hence serves as an excellent dressing for vesicated surfaces. In burns, the fresh herb bruised and applied frequently over injured parts is an excellent anæsthetic. He uses grindelia also as an excellent remedy for uterine catarrh, catarrh of genito-urinary tract, vaginitis and painful priapism. For the uterine or vaginal troubles, the tincture or fluid extract, diluted in four parts of water, should be injected; and a local application should be made, or cloths soaked in the extract should be applied as hot as possible over the pubes. Poultices of grindelia should be used for priapism.

April 3. **Effervescent Aperient Elixir of Valerianate of Ammonia and Sulphate of Magnesia.**—Dr. Edwards said he had been requested by Mr. W. S. Wills, a druggist of this city, to call attention to this preparation. Each four fluid ounce bottle holds the average adult dose, and contains 160 grs. sulphate of magnesia, 108 grs. citric acid, 2½ grs. valerianate of ammonia and ½ fluid ounce of lemon syrup, making a pleasant and efficient aperient or cathartic. Dr. E. is informed that several physicians of this city are prescribing it with marked satisfaction. Mr. Wills' letter states that when specially desired, he can combine with it muriate of ammonia, which causes a cholagogue action, bromides of potassium and sodium, carbonate of lithia, pyrophosphate of iron, sulphate of quinia, etc.

Dr. M. L. James said that he had frequently prescribed this preparation, and was pleased with it. It is acceptable to the taste and stomach, and combines one of the best, yet most nauseous, saline cathartics with one of the best nervous sedatives and antispasmodics; is mild enough for the taste of an infant. He knows of no preparation that acts so charmingly on persons who have been "on a spree." It removes the sense of fulness about the head, allays the nervousness and nausea, and acts quickly as a refreshing agent. In short, Dr. J. thinks the preparation serves a good purpose and has the advantages of being already prepared.

Large Doses of Salicylic Acid for Acute Rheumatism.—Dr. Edwards insisted that the doses in which this acid is usually prescribed for rheumatism in this section are too small; hence the frequent failures. On the morning of Jan. 3rd, Dr. E., after days of threatening, found himself the subject of the eighth attack of acute rheumatism in his life. Each of the seven former attacks (all prior to the introduction of salicylic acid) confined him to bed for variable periods of from four to eight weeks. His left knee and right elbow joints were swollen, painful and useless. As soon as the disease was fully developed, he took a dose of fifteen grs. of the dry powder. It seemed that his throat, œsophagus and stomach would "burn up," until the acid was neutralized by an unmeasured quantity of bicarbonate of soda, which happened to be in the room. These local troubles were relieved in an hour or so, by demulcents, etc. Within three hours

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He also says it controls the *nausea and retching* of gastric cancer in any stage of the disease better than any other agent he has ever used.

Dr. John E. Cowe (*Louisville Med. News*, Feb. 12, 1876) says the happiest results followed the use of the grindella in eleven cases of *bronchitis*, complicated with asthma, in which he had used the remedy.

Dr. C. J. Rademaker (*Louisville Med. News*, April 8, 1876) has "used this medicine in several cases of *chronic pneumonia*, bronchitis and in asthmatic troubles, whether depending on cardiac lesions or structural disease of lungs or bronchial tubes" with invariable benefit. He thinks the medicine is indicated in the chronic stages only, as he has derived no benefit from it in acute cases.

The process for making the fluid extract is described by Mr. Steele (to whom Mr. Baker refers) in the *Druggist Circular*, Jan., 1876; also republished in *Half-Yearly Compend. Med. Sci.*, July, 1876.

he took a teaspoonful of the following mixture, made by formula in Bartholow's *Materia Medica and Therapeutics*, without local trouble, except abominable taste—

℞ Salicylic acid,	200 grains.
Borax,	160 grains.
Water,	4 fluid ounces. M.

Another tablespoonful dose (between 20 and 25 grains of salicylic acid) was taken about three hours later. About 7 P. M., he was greatly better, when he took two teasponfuls, and repeated this dose about midnight when he was comparatively easy. In the morning he was well of rheumatism, although he then took two teaspoonfuls more. But tonsillitis developed which grew from bad to worse, resulting in tonsillar abscess, which kept him in his room for over three weeks.

No other rheumatic symptoms were noticed until about three weeks ago, which premonitory symptoms, allowed to go unchecked, culminated in even a more severe attack of acute rheumatism on morning of March 25th. The knee, elbow and shoulder joints could not be moved--they were so swollen and painful. Beginning at 7 A. M., he took by 2 P. M., at intervals of half hour, over 125 grains of salicylic acid, with the effect of entirely relieving every indication of rheumatism within the seven hours. There was no improvement until 10½ A. M.; in fact, the symptoms grew more severe until this hour, but he was so much better by 11½ that in answer to a very urgent call from a friend he was induced to try to make the visit. He took a dose of the medicine while in his buggy. As he alighted from his buggy about 12½, he was amazed at the ease with which he could walk and use his arm. He remained with his patient about 20 minutes, growing better every minute, and when he left he had absolutely no pain nor any swelling of the joints. So that he determined on visiting several other patients before returning home. He discontinued taking medicine about 2 o'clock—about this time decided dizziness developed—not unlike that sensation which comes as the result of the repetition of stimulant doses of morphia in those not accustomed to this latter drug. There was also a feeling of fulness about the head, and an annoying roaring sound in the ears, but no headache. Acuteness of vision was notably increased, but no perceptible changes in the condition of the pupils were noted. Kidneys more than normally active after midday, and the urine was light colored by 2 P. M. On returning home about 5 P. M. he was exceedingly sleepy. He was fully refreshed by an hour's nap, and attended to professional engagements until 10 P. M. Immediately preceding most of the doses of salicylic acid, he gargled mucilage [and has had no throat, stomach, or other trouble up to April 16th—no rheumatic symptom].

Dr. Edwards mentioned two other cases with results exceedingly satisfactory. A woman sick two days when treatment by salicylic acid was begun. All symptoms relieved in 36 hours, and in three days more she walked down town. She took about 80 grains per

day for two consecutive days, and a smaller quantity afterwards. The other patient, a painter, whom Dr. Edwards attended three years ago for real "six weeks rheumatism." Present attack two days old when Dr. E. was called in—patient having relied on former (alkaline) treatment up to this time. Of Bartholow's preparation, 125 grains of acid were given during first 24 hours, and then no more rheumatic symptoms, although it was deemed best to let him take from 50 to 60 grains a day for three or four days.

Dr. E. expects to meet with failures—just as they sometimes occur with quinine in malarial fevers. But in view of the vast accumulated evidence, he thinks that large and frequent doses of salicylic acid for *acute* rheumatism will soon take rank among the few "specific remedies" at present known to the profession.

Dr. C. Tompkins had treated successfully several cases of acute rheumatism by salicylic acid, given in the form of bolus.

Dr. J. N. Upshur's experience likewise favored the use of salicylic acid in acute rheumatism.

Salicin for Rheumatism.—Dr. W. W. Parker has used 20 gr. doses of salicin in three rheumatism cases with excellent success.

BALTIMORE MEDICAL AND SURGICAL SOCIETY.

Feb. 1st.—**General Infantile Paresis.**—Dr. John J. Caldwell presented the case of Harry ———, age 3½ years, who is the subject of a trouble marked by want of power to co-ordinate his movements. Although he is better now than he was six months ago, he still carries himself much as an infant of more tender years. He has just begun to try to walk and talk. Probably there is something hereditary about this trouble; for his father, until a later age than Harry, was unable to perform these acts which we expect in healthy children of 3½ years of age, although the father (as also the mother) is living apparently in good health. But the mother attributes Harry's condition to the facts that he has had most of the diseases of childhood, that she was attended in labor by a midwife, and that Harry was born feet foremost. Of course the Doctor had no confidence in the causative relation of the last two circumstances, although it is possible that his having had the diseases of childhood may have impaired or retarded healthy development. Whatever may be the cause, Dr. C. believes that this is a case of general infantile paresis, due to tardy and imperfect development—an abeyance of neuro-potence—as in the father's case. There is absence of the characteristic symptoms of ordinary infantile paralysis. The child is well nourished and apparently well developed; the temperature is normal; he has had no convulsions, nor any sudden attack after fever or other disease; there is no atrophy or shrunken condition; his limbs move at will, but without co-ordination; in his attempts at talking, his articulation is far too imperfect for one of his age. You will notice also that there is tendency to talipes

equinus-valgus, although his feet are of natural size. In true infantile paralysis there is generally as much arrest in the growth and size of the foot as of the leg. The muscles of this child readily contract under the stimilus of the faradic current, while in infantile paralysis, as a rule, the muscles respond at first only to the galvanic or constant current, although later in the disease, faradism will cause contractions.

This patient has been under treatment but a few weeks (electro-magnetism with massage, locally and generally, every alternate day, besides being well rubbed at night with phosphorated cod-liver oil), yet improvement has been marked and rapid. Dr. C. believes perseverance in this treatment will result in success. When treatment was commenced, Harry was prone, in his attempts to walk, to tumble forward on his head—having no power of co-ordination in his lower extremities to prevent his falling while attempting to walk, no co-ordinating power in his arms to protect him from falling on his forehead; but this general condition of ataxy has, in a great measure, disappeared under treatment.

There was no sign of irritation or incarceration about the glans penis or the organ itself—thus exclnding the cause of *Sayre's* reflex paralysis.

Feb. 1.—**Spinal Paralysis.**—Dr. Morris brought before the Society a man 55 years of age, cutter by trade. He noticed about six weeks ago a tingling in his hands, was unable to use his fingers with usual dexterity; gradually pain developed in the lumbar region attended by more or less loss of muscular power, and want of co-ordination of movement of lower limbs. He has a duck-like waddling gait; the feet drag slightly. Has had vertigo for a week or so upon rising in the morning. A sense of constriction about the waist has developed and is increasing. Cannot retain his water for any great length of time, but there is no dribbling of urine. Slight choreic movement of the head, and slight tremors observable about the hands and arms, although this symptom was not carefully noticed. No loss of control of sphincter ani. Sexual appetite diminished.

March 15*th.* Dr. Morris again brought the gentleman before the Society. There is now less pain in the lumbar region; the sense of constriction about the waist is much less, if not altogether wanting, and his gait has improved. The symptoms most complained of are numbness of and tingling in the fingers, and pains in the flexor muscles of the arms, principally the right arm. The patient, in answer to the inquiries of some of the gentlemen present, stated that what is left of the "girth sensation," resides now chiefly in the back, and that the lumbar pain is now reduced to a feeling of numbness; the pain in the arms is contractible in character. A week or so ago, he had pains in his lower limbs; has now no trembling—his special senses are as acute as before his sickness. Appetite and sleep fairly good. When he goes into the cold he experiences some pain and stiffness in the joints. When standing with the eyes closed, there is slight giddiness; when he turns short about with his eyes closed,

there is some slight loss of balance. He touches the edge of a chair with his toe with but little uncertainty of movement; with his eyes closed, he touches the tip of the nose with the tip of the right forefinger accurately, but uncertainly with the left fore finger.

Dr. Arnold regarded the case as possibly a functional paralysis such as was formerly called rheumatic, and thinks that the improvement noted in the case might strengthen this view. He looks upon the symptoms also as possibly indicative of an incipient myelitis of a sub-acute form. It is certainly not sclerosis, for symptoms characteristic of that disease are not present. Locomotor ataxy he would also exclude, for the symptoms described by authors as the initiatory ones of that disease, viz.: pains in the limbs, sometimes darting in character, at others rheumatoid; strabismus, temporary or permanent; involvement of the optic nerve; the exhibition of uncertain ataxia movements, &c.—were not present in his case. He was, therefore, in doubt as to his diagnosis, whether it was functional paresis or myelitis.

Dr. Miles did not think that Dr. Arnold should require the presence of positive symptoms before admitting the probability of locomotor ataxy, for the obscurity of the disease is the occasion of the presence of the patient. That a positive diagnosis should be reached, however, he regarded as of the utmost importance; for if any good were to result from treatment, it must be immediately and intelligently applied. Strabismus and optic nerve atrophy are no longer regarded as necessary precursors of this disease, nor are the pains referred to by Dr. Arnold. Locomotor ataxy is characterized by loss of co-ordination without loss of power, accompanied, to some extent, with loss of sensation. These characters are presented, although slightly and imperfectly, in this case; and Dr. Miles would certainly treat the case as one of locomotor ataxy.

Dr. Lynch also inclined to the diagnosis of locomotor ataxy, and stated that we must not look for a particular set or routine of symptoms in cases of this disease, each case being, to a certain extent, unique—bearing only a general resemblance to others of its class.

Dr. Caldwell was still in doubt in regard to the diagnosis, and felt much interested in the rheumatic functional theory, having had an analogous case, in which paraplegia was the result of rheumatic metastasis to lower part of spinal cord.

Dr. Morris, as yet, had not used electricity, in any form, and would ask Dr. Miles if he regarded the use of the constant curr as free from danger, and of possible benefit.

Dr. Miles advised it, as it can do no harm.

Dr. Caldwell wished to review the history of the case. Mr. —— is a middle-aged man, supposed to be suffering from some obscure spinal disease, with partial paralysis of motion and sensation, some abnormal sensation or tingling about his hands and feet, and with some difficulty of locomotion, with an occasional feeling of strings tied about his bowels. Can it be progressive locomotor ataxy, or wasting of posterior columns of spinal cord? No; because there

is not absence nor diminution of power of co-ordinating movements, causing difficulty in walking, nor does he lose his balance, nor has he an uncertain and tottering gait. It is, therefore, not ordinary paraplegia, in which there is impairment or loss of voluntary motion. Nor is there any trouble with the mouth, ears or eyes; no paralysis of the 2d, 3d, 5th, 6th, 7th or 8th cerebral nerves. The sensation of strings tied around the abdomen is common in locomotor ataxy and other troubles of the spinal column. If I remember rightly there is no rheumatic or sharp pains, over limited spots; no tenderness of spine in his case. Nor is there numbness in lower extremities, or feeling of insecurity when he walks; nor does he have to watch his legs to prevent staggering or falling; indeed, he walks very well with his eyes shut (the test of tests), although he does walk with a waddling gait, much like a duck—a common symptom in sclerosis of anterior-lateral columns of the cord. Again, there is no spasmodic forward motion of his legs—no loss or abnormal sensation of his feet.

Again, can it be myelitis (a very rare disease)? No, because there is no pain over the affected part. But there is numbness and a pricking sensation in the fingers and toes common to several spinal troubles, and which might be caused by a tumor of some kind. But here, again, the diagnostic tests are absent, viz:—convulsive movements of the trunk with paralysis of the arms or legs—yes, *marked paralysis of the lower extremities at a very early period.* Besides, there is not the sensation as if a cord were tightly tied around the belly, nor is there paralysis or even partial paralysis of the bladder or rectum.

Dr. Monmonier related a case of *constantly recurring dislocation of the shoulder*, due to partial paralysis of the deltoid muscle. He is using the faradic current, hoping thereby to restore the muscular tonicity, and thus prevent further trouble.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.*

April 10. The 79th annual session convened in Baltimore. Dr. Christopher Johnston, President, in the chair; Dr. W. G. Regester, Secretary—both of Baltimore. Among distinguished visitors were Drs. S. Weir Mitchell, of Philadelphia; J. S. Billings and J. M. Woodworth, of Washington, D. C.

The Relation of the Medical Profession to Courts was the subject of the President's address. In regard to the sacredness of confidential communication before courts, Dr. Johnston cited evidence to show that such communications were held to be inviolate in the case of an attorney, and were practically so in that of a priest, and claimed that they should be so where physicians were concerned. Physicians often have divulged to them secrets, solely for the better treatment of the case, which, if made public, would destroythe happiness and peace of those concerned; and to compel physicians to

*Compiled from Baltimore *Gazette* reports.

divulge these was to make an unjust discrimination against the medical profession. The essential difference in the character of the testimony of the expert and a common witness was dwelt upon at considerable length, and the hope expressed that in the near future the expert in Maryland, as in New York at present, would be at liberty to give his testimony or not, as he thought best. The doctor urged the necessity of a medical register of the state, which should contain a list of physicians, medical societies and their officers, medical libraries, manufacturers of medical instruments, and an abstract of all laws relating to the profession.

A resolution to print the address was adopted. Dr. G. J. Caldwell moved that a committee of three persons be appointed to consider the subjects of the address, which was also adopted. The treasurer, Dr. Judson Gilman, gives the receipts for the year $1,450 60, and disbursements the same. The assets of the faculty are $11,400, and liabilities $8,470. The library board reported the condition of the library excellent, and recommended the reduction of the membership tickets from $4 to $3. There are 1,504 volumes in the library; it will be catalogued and classified.

April 11.—Dr. S. Weir Mitchell, of Phila., delivered the annual oration, on *Some Extremes in Therapeutics.* The relation of science to therapeutics were at the time when most of his hearers were students, just beginning to be drawn closer, and chemical explanations were coming into fashion. Medicine to-day consisted of the practical clinical determination of the uses of therapeutic means, and of those difficult investigations which pretend to explain the manner in which medicines act. The latter mode of study had found few advocates in America, but the clinical study had found many competent investigators. But they who imagined that it was easy to excel in this study of the direct application of drugs to disease have only to look back and see how pitilessly experience has consigned to forgetfulness a host of drugs which were once thought to be valuable. Few men were really competent to decide on the true value of drugs. Out of the bewildering failures in clinics and the false pride of the laboratory had arisen the worse evil of nihilism, the utter disbelief in therapeutic means. While continental physicians have become unreasonably skeptical as to the value of drugs, they have gone to an extreme as to the influence of mineral springs. In this country a like belief has been fostered by various causes. In most cases the healthy mountainous region in which these springs were situated, the change of air, of habits, of diet, deserved to be considered as curative rather than the waters. So vast was the use of total change, that patients going from the country to the city were often better merely for that change. Formerly to let blood was as common as it is now to give tonics. But so far has the feeling against bleeding been carried that precautions almost absurd are used to prevent the loss of blood even in surgical operations. Referring to the laboratories of the Johns Hopkins University he congratulated the society on this opportunity put at the disposal of the young profes-

sion. He had not imagined that he would see among them this path to fame and honor opened so wide that the poorest could enter.

Dr. A. B. Arnold read a report upon the *Medico legal Relations of certain forms of Melancholia.* The old idea, that a man could be insane on one subject and sane on all others was fundamentally fallacious. A man's mind was not composed of powers, each independent and entirely free from any affection of the other, but consciousness must be one and indivisible. A man's feelings, thoughts or acts might show by some inexplicable feeling a connection with a particular thought, or by a delusion confined to a single subject a more limited effect of disease. But because an isolated perversion of mind existed such a mind could not be said to be wholly sound, for the unmistakable evidences of insanity relate to just such morbid phenomena, however much they differ in number and gravity.

Dr. J. N. Monmonier read a report upon embryology, the nervous supply of the lungs and other subjects in the same connection.

April 12.—Dr. L. McLane Tiffany read a paper upon the various methods of dressing wounds and the numerous instruments invented for this purpose, the use of splints, bandages, etc. He devoted considerable time to an explanation of Lister's method. Dr. Thomas read a report upon the *practice of medicine.* He first spoke of Lister's method. Dr. Bulkley, of New York, advocated the hypodermic use of ergot in purpura when impossible to administer it by the mouth. Dr. Vogle, of Berlin, had recommended cold bathing in severe cases of summer diarrhœal affections, and Dr. C. G. Comegys, of Cincinnati, reported a case where this treatment was attended with most beneficial results, the patient being an infant,and the water used from an ordinary hydrant at a temperature of 75°, together with the application of cistern water to the head. Much advantage has been derived in this city by the treatment of cholera infantum in the open air. The crib should be placed in the yard and allowed to remain there during the cool hours of night. He had known cases in which the child had been kept out even during a rainfall, being suitably protected from the water. The use of salacine, salicylate of soda,etc.,in cases of rheumatic fever had attracted special notice, and the various journals abounded in reports upon their virtues. Dr. John S. Lynch read a supplementary paper on the same subject.

Dr. W. C. Van Bibber, followed with a report upon therapeutics of pressure, somatic support and modes of dress. Referring to the latter subject, he said in both male and female dress of the present time the pressure upon the living distended parts must necessarily cause displacements and disease. The curve of the corset which has been in use for many years by females gives pressure at such a point and angle that the intestines are forced into the lower part of the abdomen, thereby hindering circulation. The "comfort" corset, which is now gaining favor, obviates this to a certain extent, but not effectually as the "chemiloon," which has recently been introduced as a female article of dress. He had seen nausea, vomit-

ing, dyspepsia, in both sexes, from wearing tight shoes. He had heard of dislocations of the ankle joint, he had seen distortions of the gait, displacement of the pelvis organs and a complete wreck of health result from small, high and badly made heels to the shoes of females.

Volunteer papers were read by Dr. S Theobald on "The uses of large probes in the treatment of strictures of the nasal duct;" Dr. B. B. Brown, "Diseases of the bladder and rectum caused by displacements of the uterus." Dr. S. C. Chew illustrated with a hospital patient a case of empyema with spontaneous evacuation.

April 13th.—Resolutions were presented from Dr. C. C. Cox of Washington, eulogistic of the splendid achievements and great talents of Prof. Nathan R. Smith, and tendering him the heartfelt sympathy of the faculty in his present bodily affliction. The secretary was instructed to send a copy to Prof. Smith.

The amendment to the constitution, providing that the yearly tax of $4 per capita for the benefit of the library be reduced to $2 per capita, to be paid by the country members, and increased to $5 for city members, was adopted.

Dr. Jos. B. Lynch offered a resolution that the president, vice president and secretary be appointed a committee to memorialize Congress and correspond with other medical societies in reference to a removal of the import duty on quinia. The resolution was unanimously adopted.

Dr. George H. Rohr offered a resolution that a committee of five be appointed to memorialize the next Legislature upon the propriety of placing public prostitution under sanitary control, to prevent the spread of loathsome disease. He stated that such a law as that contemplated by his resolution was enforced in London, Paris, Vienna and other large European cities, and had been attended with highly beneficial results. It had been alleged in opposition that the number of prostitutes was very much increased by such means, but he thought this increase was only an apparent one. In order to carry out this law it was necessary that they should be registered, and thus their number become known, while in the present condition of the evil it was impossible to correctly enumerate this class. He then spoke of the insidious nature of such loathsome diseases, their dreadful effects upon the victims, and the necessity for prevention as better than attempts to cure. There was an old adage which the faculty, as guardians of public health, should remember in this connection, viz: that the "public health was the supremest law". Dr. J. C. Thomas, in opposing the resolution, cited as an example of its practical working the city of St. Louis, where it was tried, and while it checked disease, it had the effect of so increasing social evil that public opinion compelled its repeal. The subject was tabled.

Election of officers: Dr. A. B Arnold, president; Drs. S. C. Chew, Ferdinand Chatard and Charles H. Jones, vice presidents; Dr. W. G. Regester, secretary; Dr. G. Lane Taneyhill, assistant secretary; Dr. W. F. A. Kemp, corresponding secretary; Dr. Judson Gilman,

treasurer; Drs. J. Carey Thomas, J. F. Monmonier, P. C. Williams, Christopher Johnson and Henry M. Wilson, executive committee; Drs. W. G. G. Wilson, E M. Hardcastle, A. M. White, A. H. Bayley and James B. R. Purnell, board of examiners for the Eastern Shore; Drs. Nathan R. Smith, F. Donaldson, A. Friedenwald, J. S. Lynch, A. Hartman, T. B. Evans and T. S. Latimer, for the Western Shore.

The following were appointed delegates to the Amer. Med. Ass'n: Drs. C. H. Ohr, J. T. Wilhelm, G. W. Wayson, H. M. Wilson, W. C. Van Bibber, James C. Thomas, L. McLane Tiffany, J. Robert Ward, L. H. Steiner, Samuel P. Smith, Thomas W. Simmons, Jas. A. Steuart, James L. Stevenson, G. Ellis Porter, John F. Powell, John H. Patterson, John Neff, J. F. Monmonier, John Morris, S. C. Chew, J, S. Conrad, I. I. Cockrill, G. Benson. Delegates to the North Carolina Society: Drs. H. E. T Manning and W. T. Howard. Virginia Society, Drs. T. S. Latimer and P. C. Williams. Pennsylvania, J. C. Thomas, Thomas S. Murdock. New York, Drs. W. G. Regester, C. F. Bevan. Ohio, Drs. John Morris, R. Winslow, J. E. Atkinson, A. B. Arnold, T. S. Latimer, Charles. H. Jones, L. W. Houck, E. Loyd Howard, Judson Gilman, A. Friedenwall and W. H. Diffenderfer.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

The tenth annual session convened in Grenada, April 4th—the President, Dr. P. J. McCormick, in the chair, Dr. Wirt Johnson, of Jackson, Secretary.

After prayer by Rev. S. H. Greene, of the Episcopal Church, Dr. W. W. Hall, on behalf of the local profession, delivered a handsome address of welcome; which was followed by another address on the part of the town by the Mayor, Hon. J. L. Milton.

After the order of business had been announced by the Committee of Arrangements, Dr. Hall, Chairman, Dr. McCormick delivered the annual address of the President.

A large number of applicants for membership were elected.

The report of the Executive Committee, through the Chairman, Dr. J. M. Taylor, contained a copy of the act creating the State Board of Health. The importance of such a Board was strongly urged in addresses by Drs. Compton, S. V. D. Hill, A. G. Smythe, Taylor and B. A. Vaughan.

After reports on Puerperal Fever by Dr. S. V. D. Hill, and on the Surgical History of Mississippi, by Dr. W. W. Hall, the Association adjourned until 8.30 P. M., when Dr. B. F. Kittrell delivered a neat and appropriate address to a large and select audience of ladies and gentlemen.

April 5th. Dr. Hart gave a detailed history of several cases of lithotomy.

Dr. Rice reported several cases of vesico-vaginal fistula.

Dr. Booth reported a case of cauliflower excrescence of the glans penis, exhibiting the specimen. He also reported an interesting case of wound of the axillary artery.

The call for reports on special medical topics was continued during the afternoon, and the following were received.

Rheumatism—Dr. P. J. McCormick; Resuscitation from death by Chloroform—Dr. C. A. Rice.

The committee to select members of the State Board of Health reported: For the first congressional district, Drs. J. M. Taylor and A. G. Smythe; second district, Drs. T. D. Isom and John Wright; third district, Drs. E. W. Hughes and S. V. D. Hill; fourth district, Drs. C. B. Galloway and P. J. McCormick; fifth district, Drs. Robert Kells and C. A. Rice; sixth district, Dr. R. G. Wharton and P. F. Whitehead.

Dr. Rice presented a paper of Dr. H. C. McLaurin on a case of scarlatina anginosa treated with sulpho-carbolate of sodium.

Dr. Hill reported the case of a child that recovered after swallowing a large quantity of broken glass and other substances.

Dr. Booth introduced the subject of sulphate of cinchonidia, which was discussed by himself and Drs. Meriweather, Quin, Craft, J. W. Hall, Hill, Gray and Hyer.

The President announced the following committees on the selection of special medical topics: Drs. Vaughan, Mayes and Turner; on nomination of delegates to the American Medical Association: Drs. Taylor, Trotter, Halbert, Booth and Craft; on Publication: Drs. Kells, Craft, Bailey and Wirt Johnson; on Arrangements: Drs. Craft, Kells, Bailey, T. J. Mitchell and Wirt Johnson; on Necrology: Drs. Smythe, Hart and Robert Smith.

Dr. J. W. Hall read a paper on Dysentery.

Dr. Lee Williamson read a paper for Dr. D. A. Kinchloe on a case of partial paralysis involving the muscles of the neck and eyes, from peripheral irritation.

Dr. Halbert read a paper on pneumonia.

The Secretary read an invitation from the Grenada Medical Association to attend an entertainment at the Chamberlin House this evening.

During the evening session Dr. Hill read a paper on laceration of the perineum.

Dr. Hyer made interesting remarks on the use of ergot in enlarged spleen.

Dr. Booth related several cases of pneumonia treated successfully with arnica.

Dr. Whitehead reported a case of hæmorrhage from the bowels treated successfully with ergot.

Dr. Hill reported cases of hæmoptysis treated successfully with the same agent.

Dr. Trimble reported an obstinate case of purpura hæmorrhagica, and a case of menorrhagia with threatened abortion treated successfully with the same agent.

Dr. Gray reported cases of menorrhagia treated successfully with the same agent.

Dr. Brownrigg made interesting remarks on the influence of climate on phthisis pulmonalis, and was followed by Dr. Whitehead on the same subject.

Dr. Whitehead reported a case of puerperal convulsions treated successfully with veratria.

April 6th. The Committee on the Selection of Special Medical Topics, reported as follows: Salicylic Acid, Dr. Wirt Johnson; Croupal Pneumonia, Dr. J. W. Holman; Use of Cold in Pyrexia, Dr. C. B. Galloway; Electro-Therapeutics, Dr. R. G. Wharton; Insanity, Dr. Robert Kells; Scarlatina, Dr. C. A. Rice; Epidemic Cerebro-Spinal Meningitis, Dr. E. W. Hughes; Organic Stricture of Urethra, Dr. S. V. D. Hill; Arsenic in Diseases of the Skin, Dr. R. S. Ringgold; Chloral Hydrate in Obstetrics, Dr. J. E. Halbert; Relative value of Sulphate of Quinia and Sulphate of Cinchonidia, Dr. D. W. Booth; Early Management of the Infant, Dr. J. T. Parker; Hygiene in the Sick Room, Dr. F. W. Dancy; Optic Circulation in Insanity, Dr. W. M. Compton; Syphilis in the Negro as differing from Syphilis in the White Race. Dr. Wm. Powell; Surgical History of Mississippi, Dr. W. W. Hall; Bromides, their Influence on the Materia Medica, Dr. John Brownrigg; Malaria, its Influence on other Diseases, Dr. P. T. Baley; Chronic Diseases of the Cervix Uteri, Dr. J. M. Taylor.

The Association proceeded to the election of officers for the ensuing year, which resulted as follows:

Drs. B. A. Vaughan, Columbus, President; E. W. Hughes, Grenada, T. R. Trotter, Duck Hill, T. P. Lockwood, Crystal Springs, and J. T. Parker, Buena Vista, Vice-Presidents; Wirt Johnson, Jackson, Recording Secretary; C. A. Rice, Brandon, Corresponding Secretary; Robert Kells, Jackson, Treasurer; D. W. Booth, Vicksburg, Orator; J. E. Halbert, Leota Landing, Alternate Orator.

The Association adjourned to meet at Jackson the third Wednesday in January, 1878.

Analyses, Selections, &c.

Cinchonidia a Substitute for Quinine.—J. W. Compton, M. D., Evansville, Indiana, read a paper of deep, practical interest on this subject before the Kentucky State Medical Society, 1876, which we find in the *Transactions* of that year. In view of the near approach of the malarial season, and with the purpose of fully arming our readers for the conflict, we make the following extract:

"The subject of the brief paper which claims your attention

is embraced in the question, Have we, in sulphate of cinchonidia, a reliable substitute for sulphate of quinia? In attempting to answer this question, I shall endeavor to do so in the most practical manner. I will read a communication on the use of sulphate of cinchonidia, published in the *Medical and Surgical Reporter*, from Dr. J. E. Lyons, of Huntington, Indiana, October 11, 1875, in which my views are expressed in better style than I could present them myself."

In the early part of the past summer, Mr. Hall, representing the manufacturing house of Powers & Weightman, called at my office and presented me with an ounce of sulphate of cinchonidia. The reputation of the house, together with the paper of Dr. Sinkler, which was published in your journal, was a sufficient guarantee for me to use the article with confidence of success.

Since receiving the first ounce, I have used it as an antiperiodic in intermittent and remittent fevers, and in fact in every case where I considered quinine indicated to the exclusion of everything else, with entire satisfaction during the Summer and Autumn. I have only prescribed quinine in one case—a very severe case of remittent which I thought was rather protracted—and there the cinchonidia had produced the desired effect before the quinine had been given. I have used ten ounces since commencing, and in many cases of a grave character, in about the same doses that I would have used quinine; and the only perceptible difference to me, at least, is it does not control the disease quite so promptly as quinine, generally requiring from one-third to one-half more time to produce a given effect. In reference to that, I have not tried what effect an increase in the dose might have; perhaps some one else has, and will tell us; but the effect, when produced, as, for instance, the interruption of an intermittent or remittent, is more permanent and lasting than when quinine was used. I have evidently had fewer relapses than when using quinine.

Another advantage has been very perceptible to me: it is better tolerated by the stomach, not being nearly so liable to produce nausea and vomiting, especially when given during the height of the febrile exacerbation. And another, in my experience, small as it may be: I have not heard any complaint whatever of ringing or buzzing in the ears, of steamboats or locomotives in the head, or of temporary deafness.

In the use of sulphate of cinchonidia, the saving of the pence is an item of importance. Without reference to the advantage gained in that direction, I shall continue to use it, if it shall give the same satisfactory results in the future as it has given in the past.

Estimating the amount prescribed by the amount used in my office principally for country patients, I have used at least fifty ounces during the late malarial season, and, with the advantage of larger experience, I fully concur with Dr. Lyons' favorable report on sulphate of cinchonidia as a substitute for sulphate of quinia.

Dr. Bensley, one of a committee appointed by the British East India Government to test the value of the cheap alkaloids of cinchona bark, says of sulphate of cinchonidia: It is admirably adapted to those cases requiring a tonic febrifuge, in which there is, at the time, a great tendency to diarrhœa, or where diarrhœa already exists; that where quinine produces these disturbances, the cinchonidia is well borne. None the less valuable is it in consequence of the mildness of its influence on the nervous system. He further says: I have used it extensively in the fevers of children on account of its mildness, and because it is less liable to produce head and bowel disturbances than the other alkaloids.

Upwards of thirty of my cases were children, varying in age from one to nine years. I have such confidence in it that it is the only preparation I prescribe for children. It is a well known fact that there exists with many persons a strong prejudice against quinine, and it is a great advantage to be able to say to such persons that you have a remedy that will be equally efficient, in all cases where quinine is indicated, without being liable to the objectionable effects of that remedy.

The advantages to be derived from the use of sulphate of cinchonidia may be summed up as follows: (1) Fewer relapses follow its administration. (2) It is better tolerated by the stomach, not being nearly so liable to produce nausea and vomiting. (3) It does not create the same amount of ringing and noise in the ears that characterizes quininism. (4) It is not liable to produce temporary deafness. (5) It does not produce nervous excitability. (6) It does not produce or increase diarrhœa. (7) It obviates the prejudice existing against quinine. (8) Its cost is but one-third that of quinine.

Electrolytic Treatment of Stricture of the Urethra.—Dr. R. G. Wharton, of Port Gibson, says (*Trans. Miss. Med. Ass'n*, 1876):

Galvanism was used for stricture of the urethra thirty years ago; first by Scudamore, then by Crussel, a German physician, and by Spencer Wells, and others; but it attracted but little attention till it was revived within a few years by Tripier, of Paris, and Althaus, of London. In this country Dr. Robert Newman, of New York, has done more to recommend it for this disease than any other man,

in a report made to the State Medical Association of New York, two years ago.

The patient who has had his urethra dilated or cut, must always have his bougies with him. The deposits of lymph on and under the mucous surface of the urethra which cause the stricture, tend to contract and harden, and the longer they remain, the more dense they become.

The electrolytic treatment effects a radical cure, by absorbing these products of inflammation, and restores the urethra to its normal state. This absorption goes on for some time after the application, as I have observed that a larger bougie can be introduced two weeks after the operation than at the time of the operation. This is supposed to be due, to some extent at least, to the presence of the alkalies liberated by the decomposition of the tissues. The current also modifies nutrition, producing an alterative effect, as has been often observed in the case of malignant tumors, not only relieving pain, but sometimes effecting a cure.

The negative pole is applied to the stricture, by means of an insulated sound, with a metal bulb on the end; the positive pole, with a wet sponge, is held in the hand or applied to any part of the body. The bulbs are egg shaped, about half an inch long, and I use one, two or three sizes larger than the stricture. The contact of the positive pole, armed with the metal bulb, with the urethra, causes great pain, while if the negative pole is used with the bulb, as it ought always to be, there is no pain—only a slight pricking or burning sensation, provided the current is not too strong. The elements, zinc and carbon, ought not to be immersed more than one-eighth to one-quarter of an inch in the battery fluid, otherwise too much electricity is generated, and the action partakes too much of the nature of galvanic cautery.

Case I.—*August* 1, 1875, a man, 25 years of age, came to be treated for gleet. He has had gonorrhœa for four months. His urine is passed in a twisted stream and falls near his feet. On examination I found three strictures, at 3 inches, at 4⅝ inches, and at 6 inches, respectively, from the meatus. I introduced the insulated sound, with metal bulb, No 20, French scale, and connected it with the negative pole of the battery of 12 cells while the sponge with the positive pole was held in the hand. The bulb was simply held in contact with the stricture, no force being used, and it absorbed or decomposed the stricture and went through in eight minutes. There was no pain during the operation, but the urine scalded the next day, and there was a slight discharge of blood. He said that he felt great relief from the operation, the gleety discharge was diminished, and he was in much better spirits. I repeated a similar operation on the next stricture in two weeks, and had to make three applications before I got to the last stricture, November 5th. This last stricture, before the operation, admitted a silver catheter, No. 16, French scale; I used bulb No. 20 as before, and with 10 cells, it passed through in eight minutes. On the 29th, I found no trace of stricture, and he continues perfectly free from them.

Case II.—*Dec.* 4, 1875, I was sent for early in the morning, to see a man who was suffering from inability to pass his urine. I found him in great agony. The spasmodic efforts to pass his urine, coming on every five minutes, resembled the throes of labor. His face was red and swollen, and he was wet with perspiration. He had been in this condition nearly the whole night, and had not been able to pass a drop of water for eighteen hours. The bladder was much distended. I had him put in a hot bath, sitting, and made repeated efforts to pass the catheter; but even the smallest size could not pass, and some blood came from these repeated efforts. I now used the aspirator; made him sit up in a chair, with his head thrown back, and introduced the finest sized needle. As he was very fat, I feared my needle (only two inches long) would not reach the bladder. But as soon as it was pushed in the whole length the water came in drops, and in twenty minutes I drew off eighteen ounces with such great relief that he nearly fell asleep before leaving the chair. Eight hours afterwards I aspirated again, introducing the needle one-fourth of an inch from the first puncture, and drew off twenty-two ounces in twenty-four minutes. He was restricted in his drinks (he ate nothing); take a dose of salts to prevent accumulation of urine. He was quite feverish and had no appetite.

He slept well and the salts had operated. I restricted him in fluids, tried the catheter at 5 P. M., and again at 9 P. M., without success. As twenty-four hours had now passed since the urine had been drawn off, I aspirated the third time, and drew off twenty-one ounces in twenty-five minutes.

Dec. 6th. Had a good night; no fever; passed the day comfortably.

Dec. 7th. Was better; bladder not distended, as he had passed about four ounces of water during the night and had abstained from fluids. I tried the catheter again and failed to introduce it. He was comfortable during the day, and passed some water at 9 P. M.

Dec. 8th Easy; passed some water before day. I tried the catheter patiently, and for some time, and failed again—much blood came; the catheter went in further than before.

Dec. 9th. He passed enough water to relieve the distention.

Dec. 10th. Succeeded in passing a small size silver catheter into the bladder; he took a little nourishment for the first time since the 3d instant.

This man is 45 years of age; had gonorrhœa in 1857, for some months, but does not remember any very special trouble with it till during the war. He has suffered a great deal at different times for the last six years and says that on three different occasions he was unable to pass any urine for a short time. For the last year he has been obliged to get out of bed several times every night, and it often takes from ten to twenty minutes to urinate. After waiting a few days I examined him carefully, and found one stricture seven-eighths of an inch from the meatus, very tough and fibrous; another

at five and one-quarter inches that was three-quarters of an inch long; and a third one at six and one-half inches. A bougie No. 15, French scale, would pass the first, but not the second stricture. I began the electrolytic treatment December 10th, using bulb No. 17, French scale, with 14 cells ten minutes, but did not get through. There was no pain from the operation, only a slight smarting that day in urinating. He came on the 27th; the stricture was a very little larger, but the bulb No. 17 would not pass; hence I used it again and for fifteen minutes, as the battery fluid was weak and the stricture tough, it did not go through.

Jan. 8th. Silver catheter No. 16, passed through the first stricture, and I used the bulb No. 17, for the third time, with 10 cells; this went through in ten minutes.

Jan. 20th. Silver catheter No. 16, went in six inches, and I used the bulb No. 17, with 14 cells, for twelve minutes, and it went in only six inches.

Jan. 31st. Another operation, 12 cells, twelve minutes, but the bulb went in no further.

Feb. 11th. Silver catheter No. 16, went in seven and one-quarter inches; the bulb No. 17, went in only six inches.

22d. Catheter No. 18, went into the bladder. I now used No. 20, with 12 cells, fifteen minutes, and it went in only five and one-half inches.

March 23d. The next operation, silver catheter No. 18, went into the bladder easily. The bulb No. 20, went in six inches; after eight minutes went in six and a half inches.

April 6th. Bulb No. 20, went easily six and one-half inches.

21st. Bulb No. 20, went in six and three-quarter inches, and after ten minutes, with 14 cells, it went in seven inches. This last operation caused a great deal of soreness and smarting in urinating for twenty-four hours.

May 5th. Slight trace of stricture; the bulb passed through in a few minutes.

May 19th. In three minutes the bulb went into the bladder easily. Examined carefully with the bougie and bulb and found canal perfectly smooth and normal, all trace of the strictures entirely gone.

I report this case with so much detail because it was one of the worst that could be subjected to this method of treatment. Although there were three distinct strictures, yet a large portion of the canal was narrowed by the fibrinous deposits, which from their long standing were very tough, and the successful issue of the case may well encourage us to believe in the efficacy of the electrolytic treatment of stricture.

[Dr. Wharton, while renewing his subscription (April 10), incidentally remarks that both of these cases have fully recovered. The above cases are selected from an excellent report on the subject of Electro-Therapeutics, published in the *Transactions* of the Mississippi State Medical Association, 1876.—Ed.]

Book Notices, &c.

First Annual Report of the State Board of Health of the State of Wisconsin, for the year ending December 31, 1876.

This first official contribution from Wisconsin to the great work of sanitary improvement which now occupies so many minds and unites the efforts of so many hands, affords gratifying proof of the energy and intelligence with which the State Board of Health has entered upon the discharge of the duties assigned to it. The law establishing the Board was passed in March, 1876; it held its first meeting in June, and in little more than six months thereafter presented to the Legislature the first fruits of its labors in the report before us. This document of 128 pages contains the act establishing the Board, the proceedings of the Board at its different meetings, the plans and arrangements adopted for the prosecution of its work, copies of circulars issued for the collection of information, extracts from its correspondence, &c., and the following papers: 1. Small-pox and its Prophylaxis, by Dr. E. L. Griffin, President of the Board. 2. Sewerage and Drainage, by Dr. Solon Marks. 3. Ventilation of Public Buildings and Dwelling Houses, by Gen. James Bintliff. 4. Mental Hygeine, by Dr. John Favill. 5. Foods and Domestic Beverages, by Dr. O. G. Selden. 6. The Necessity and Advantages of a Registration of the Vital Statistics of Wisconsin, by Dr. Joseph Hobbins.

These papers are neither lengthy nor elaborate, but are therefore the better adapted to the object for which they are mainly designed, viz.: to interest and instruct the intelligent public in matters connected with public and individual health, and to demonstrate the practical value of sanitary teachings. They are not so long but that they may be "read, marked, learned and inwardly digested" by an extensive class of readers. Want of space forbids a detailed notice of these papers; we can only say in general terms that they are well written, and contain much interesting and valuable information on the subjects of which they treat.

Wisconsin appropriates $3,000 *per annum* to the support of her State Board of Health. If our own State had done as much, the Board which she legislated into nominal existence five years ago would now have been in regular and successful operation, instead of being entirely defunct. "*Stat nominis umbra*" is the brief and sad expression of its fate.

Annual Report of the Surpervising Surgeon-General of the Marine Hospital Service of the United States, for the Fiscal Year 1875. JOHN M. WOODWORTH, M. D.

This neat and well-printed volume of 229 pages, in addition to the customary report of the operations of the Marine Hospital Service, so ably directed by Surgeon-General Woodworth, contains a number of "Contributed Papers," of which the following are of interest to the profession at large: 1, 2, 3. Yellow Fever at Key West, at Barrancas, and at New Orleans and Pascagoula, in 1875, by Surgeons Murray, Herron and Vansant, respectively. 4. Syphilis and Chancroid, by Surgeon Bailhache. 5. Consumption, by Surgeon Hamlin. 6. Scurvy, by Surgeon Ellinwood. 7. Seton in Paralysis and Epilepsy, by Surgeon Griffiths. This last paper contains some noteworthy results of experience, both in hospital and private practice, illustrating the remedial efficacy of the seton in the diseases mentioned. The writer reports eighteen cases of paralysis (nearly all hemiplegia), and five of epilepsy, treated with the seton in the Marine Hospital at Louisville. Of the former, there was only one which was not benefitted; ten recovered, and the remaining seven were much improved. No medicines were administered except tonics. Of eight cases of hemiplegia treated in private practice, six recovered and two improved. Of five cases of epilepsy, two recovered and two improved. These were treated only with the seton and tonics. A single one received no benefit; nor did the addition of bromide of potassium to the remedies effect any improvement. Dr. Griffiths always employs a large seton, consisting of fifteen or twenty strands of silk or flax thread, which is allowed to remain for months, if necessary.

The Medical Register and Directory of the United States Systematically Arranged by States, has just been issued from the office of the Medical and Surgical Reporter, Philadelphia, This is the second edition, revised and corrected, and contains "the names, P. O. addresses, educational and professional status of more than 50,000 physicians, with lists of medical societies, colleges, hospitals, and other medical institutions, with abstracts of medical laws of each State, notices of mineral springs, etc." A more successful attempt to present a useful work of the kind indicated by the title could scarcely have been made.

The Medical Register of New York, New Jersey and Connecticut, edited by Alfred E. M. Purdy, New York, published by G. P. Putnam's Sons, is very complete, accurately edited and handsomely issued.

Editorial.

Dr. Sims' Article.—It is with deep regret that, at the latest possible moment that we can wait for the article on the *Discovery of Anæsthesia* by Dr. J. Marion Sims, we are compelled to go to press without it. Unfortunately, Dr. Sims was ill while on his recent trip to the home and friends of his early life, and was unable to finish the paper until after his return to New York, about the 1st of April. After the manuscript was received and set up in type, revised and corrected, and ready for the press, we received a telegram from the author asking us not to go to press with it until he could again revise the proofs, as he had just obtained more facts which he desired to insert in his paper.

This article, which is of the intensest interest throughout, will appear as the leader in our May number, which number we shall try to issue by May 10th. The article will be accompanied by *two* steel plate engravings (one of which is now being prepared). The engravings of Horace Wells are already in hand.

We will not anticipate the author, but we promise our readers a rare treat, and feel sure that Dr. J. Marion Sims will hereafter be recognized as the impartial and truthful historian of the *Discovery of Anæsthesia*. We may further express our wish in advance that every one will carefully consider the suggestions made in the conclusion of his article, and that each member of the profession, with a generous impulse, will heartily endorse the propositions, and untiringly work to secure the end in view.

The Virginia Medical Monthly begins its fourth annual volume with this issue under very encouraging circumstances. Although a most depressing financial condition has oppressed the nation since the birth-day of the *Monthly*, it has yet toiled on, steadily developing and gaining friends everywhere. Its circulation now extends from Upper Canada, southward throughout the United States into Mexico, and further south into Brazil, while East and West it reaches into countries across the oceans.

The "new feature," which was begun in our January number, in the presentation of an exact steel-plate engraving and an accurate biographical sketch of the world-famed Dr. J. Marion Sims, has proved very acceptable to our subscribers. Our May number, as above announced, will contain a steel-plate engraving of the *discoverer of anæsthesia* by sulphuric ether, and also of Horace Wells, who, nearly two years and a half later, discovered anæsthesia by nitrous oxide gas. Arrangements are being

made for the presentation of the promised engraving and biographical sketch of Dr. Hunter McGuire, of Richmond, in our October number, 1877. And now we are glad to be able to announce that a future number of the *Monthly* (to be more definitely indicated hereafter) will contain a steel-plate engraving and biographical sketch of Dr. Lewis A. Sayre, of New York.

It would take a page to name the distinguished medical writers who have promised to contribute to the pages of the *Monthly*. We content ourselves with the statement that in the selection of our contributors and their articles, we shall at all times have an eye to the special wants of the general practitioner. In short, we shall spare no effort to make the *Monthly* the rival of the best practical medical journal in America.

In the hope that we may add still more largely to our subscription list, we have issued a large edition of this number, which allows us to send copies to many who are not subscribers. For the convenience of such parties, as also for those who have not renewed their subscriptions, we have instituted a blank in each copy, which can be torn out, filled and returned to us. We hope that subscribers who have paid for volume IV will induce some friend to fill their blanks, with the cash (preferably Post-office money order), and return to us without delay. There is no time better to begin subscription than with the April No.

Leprosy in India.—Dr. James McAlister, Deputy Sanitary Commissioner of Konkun District, Tauna, Bombay, while renewing his subscription, writes that being "interested in all matters connected with the sanitation of towns and districts, vital statistics, the history of epidemics, etc.," he wishes to procure American Sanitary reports.

He says: "I have a very large district to look after, with cholera, small-pox and leprosy as endemic diseases. I presume you see very little of the latter complaint in America. Here in this little town on the coast of Western India, about 250 miles South of Bombay [City], there is a leper asylum with 140 inmates. From the coast, the country retreats inland for seven or eight miles. The idea occurs to me that leprosy may have been introduced by sea, and is spreading inland. A few sea-side villages will be found free from the disease and from all history of it; and this, it appears to me, is a striking circumstance. Towards the interior, leper localities are found distributed like fruit on the branches of a tree, or like metals in the lodes of a mine—there being vacant interspaces wherein the villages, of whatever size, are free. Again, from certain large towns, the

the disease seems to have indented, as it were, lines of intercourse, and this, not indiscriminately.

I shall be glad if you can help towards getting any American literature on the subject."

Tariff on Quinine.—At the late meeting of the Kentucky State Medical Society in Louisville, Dr. Larrabee, after a few remarks in explanation, read the following resolutions which were adopted:

Whereas, It has come to our knowledge that a bill, known as the "Morrison Bill," for the discontinuance of the "tariff on quinine," is at this time before the Committee on Ways and Means in the Congress of the United States; and

Whereas, The welfare of a large portion of the people in the Western States and Territories is concerned in the issue of this bill, as well as any movement which will enable them to obtain quinine at a less cost than the enormous prices now paid by the consumer; and

Whereas, The opposition to this bill set forth by the manufacturers and trade, does not represent the desires of those who are engaged in the relief of suffering and want, but ignores entirely the necessities of this large population, many of whom are engaged in cultivating the soil and opening up new resources of wealth to the Government in the malarial districts; and

Whereas, Principles of justice and humanity alike demand free quinine and an open market for the competition of European manufacturers; and

Whereas, We, the members of the Kentucky State Medical Society in Convention represent the sentiments of the people of this Commonwealth upon this important subject; therefore be it *resolved*,

First. That we endorse the "Morrison Bill," and further pray that your honorable body will hear our petition.

Second. That a copy of these resolutions (printed) be sent to similar organizations of physicians, meeting in the various States.

Third. That these resolutions, with the signatures affixed, be furnished to our Senators and Representatives in Congress of the United States, at its next meeting.

[Signed] R. W. GAINES, M. D., Pres't, &c.

These resolutions commend themselves to the favor of every good citizen, without regard to profession or trade. We suppose the matter will be brought to the attention of the American Medical Association, as well as to that of the several State Societies. The *Southern* States are as much interested in the success of this Morrison Bill as are the Western States.

Our Advertising Department is a very important one. It should always be carefully read over. Our editorial notices are not in any manner bought by advertisers; we try to make these notices practical, and *for the benefit of the subscribers.*

Garratt's Electric Disks.—The value of electricity as a therapeutic agent has finally become appreciated the world over; but from the nature of things, electro-therapeutics must form a specialty in medicine. There are, however, one or two batteries of the first importance to the general practitioner. Such a battery, is the familiar electro-magnetic machine, provided with sponge electrodes, for applying the induced to and fro, or secondary currents for stimulating the nerves and muscles. There is also the scientific Electric Disk of Dr. Garratt, which is self-acting and constant for gentle and prolonged applications of the "primary currents." This appliance has a wide range of uses. It is of least cost and care to the patient, least trouble to the physician, and yet for very many cases, it proves completely successful. We all know how troublesome and frequent are the complaints of "weak backs," lumbago, stiff necks, sciatica, gastralgia, faulty liver, heart, stomach, "pain in the side," thorax, or ovarian region, etc., in spite of iodine, plasters and liniments. With the aid of a large Garratt's disk such cases can be more frequently saved from the hand of the quack than by any other agent known to us. Dr. Garratt's disk is *twelve* times stronger in power to overcome resistance for gentle electrolysis in the skin and nerves than the disks of Bird and Gull, of London, on the limbs, or by McKenzie, of Dublin, for the throat. Twelve little streams of the primary current are constantly self-generated by the disk, and are caused, by its arrangement, to pass in parallel lines in close proximity through the flesh so as to secure a more perfect polarizing effect. This effect is secured, for pain is relieved and strength is restored.

Planten's Medicinal Capsules.—To obviate the objections of bad taste and nauseous effects of certain important medicines, no expedient has proved more successful than the capsules made by Messrs. H. Planten & Son. The capsules, while concealing the taste and smell of nauseous drugs, are yet perfectly soluble in the stomach, but will remain perfect upon the apothecary's shelf, and stand any climate. The International Jury awarded the firm the diploma of merit, and the Commissioner's medal for general excellence of manufacture of these goods. While Messrs. Planten & Son's house have always on hand capsules charged with the most commonly prescribed medicines (see their advertisement on page facing first reading matter), they also keep on hand empty capsules which the druggist or the country practitioner can fill with such agents—powder, solid extract or fluid—as he may desire. We frequently prescribe them with the greatest satisfaction—indeed, know no satisfactory substitute for these capsules.

Animal Vaccine Virus.—We have read, with great interest, the *Propositions* of Dr. Frank P. Foster, presented to the New York

Academy of Medicine (Reprint from *Trans.*, etc., Vol. I, 2d series.) This paper helps to establish, 1. "Vaccination of the human subject with animal vaccine is attended with a degree of success, as regards the production of vaccinia, equal, to say the least, to that obtained by any other method of vaccination." 2. "Vaccinia produced by the use of animal vaccine is genuine, and is as thoroughly protective against small-pox as is that obtained by the use of any other form of vaccine." 3. "The use of animal vaccine does not entail the dangerously severe local inflammatory and general febrile complications which have been attributed to it by some writers." 4. "Animal vaccine is, equally with humanized vaccine, capable of preservation for a considerable length of time, for transmission to remote parts." 5. "The use of animal vaccine eliminates one of the elements in the causation of vaccinal syphilis, and thus helps to silence the anti-vaccination agitators." 6. "Animal vaccination is the most trustworthy safeguard against failures of supply of vaccine in emergencies."

The Beaugency lymph secured by Dr. Foster has been largely used by practitioners throughout the country—in the army and navy, New York, Boston, New Orleans, Baltimore, Richmond, Chicago, San Francisco, Galveston, etc., and the favorable results everywhere secured by it add greatly to its popularity and general use.

Messrs. Warner & Co's Soluble Sugar-Coated Pills, as will be seen by reference to their circular advertisement after reading matter, obtained the first award at the World's Fair in Philadelphia. "The pills of Phosphorus are worthy of special notice." As to the solubility of these pills, a recent article in the March number of *New Remedies*, by Dr. Leroy M. Yale, proves that of all the pills tested, those of this firm are the most soluble. A great deal of unnecessary discussion has lately been going on about this subject of solubility of pills. It too often occurs among doctors that the solubility of some special pills is denied because undigested pills are passed at stool in certain cases, when in reality it seems to us to have been thoughtless on the part of the doctor to have prescribed pills at all. A stomach that has scarcely the power to absorb water, can not be called the proper place in which to test the solubility of any solid substance.

Award to Messrs. Billings, Clapp & Co.—"The undersigned, having examined the products herein described, respectfully recommends the same to the United States Commission for award, for the following reasons, namely: A very fine display of chemicals, especially carbolic acid, propylamine (trimethylamine), chloride of propalymine; and also of pharmaceutical chemicals, such as citrates of iron and quinia, citrates of iron and manganese, citrates of bismuth and ammonium, pyrophosphate of iron, bromide of potassium, bromide of ammonium, chromic acid, valerianic acid, and many others, commended for fine display and excellence of chemicals. [Signed] F. A. Genth, Judge. *Approval of Group of Judges—*

J. Lawrence Smith, P. De Wilde, E. Paterno, F. Huhlman, Dr. V. Wagner, Charles A. Joy, J. W. Mallet."

Sulphate of Cinchonidia, is rapidly coming to take the place of quinia, and it is fortunate that we can find in it so efficient a substitute. The high market price of quinia practically places that article out of the reach of the laboring class of our population—the class which most generally calls for treatment. We take special pleasure in calling attention to the advertisement of Messrs. Powers & Weightman on the subject, which contain a statement of some interesting facts. Under the head of *Analyses, Selections, etc.*, in this number, will also be found a paper of practical value on the subject, especially to Southern and Western physicians.

The Retreat for the Sick is a new hospital enterprize in our city, which is fully explained in the advertisement of it in this issue, to which we refer our readers for information. It is of interest especially to physicians of Virginia, West Virginia and North Carolina.

Mr. W. S. Wills,, agent, begins an advertisement this month of Effervescent Aperient of Elixir of Valerianate of Ammonia and Sulphate of Magnesia, which is also noticed in the proceedings of the Richmond Academy of Medicine. The article is used in this city by a number of physicians. A friend remarked to us the other day that it is the best thing he ever tried to do away with the effects of a spree.

Messrs. Hance Brothers & White, of Philadelphia, begin an advertisement in this number. This house has such a favorable reputation because of the excellence of their pharmaceutical products, that we need not do more than say that they keep up an excellent line of physicians' and druggists' supplies.

Scheffer's Saccharated Pepsin has been frequently proven, by experiment and observation, to be, as Dr. C. W. Thomas says in the Fourth Transactions of the Medical Society of Virginia, superior to all others in the market, "and is deserving of universal use."

The State Board of Health of North Carolina.—The law establishing this Board was enacted during the late session of the North Carolina Legislature. Too much credit cannot be awarded to Dr. Satchwell especially, for his indefatigable efforts in securing the law by personal attendance in Raleigh during the session of the Legislature. By this act, the State Society appoints the Board, and, as it were, becomes the supervisor. We have long ago expressed our convictions on this matter—that the State Board should be directly responsible only to the State authorities, and as such should receive sufficient compensation to justify the State to *demand* of the Board such attention to their duties as is expected of other State officers. But we suppose that the law enacted was the best that could have been secured, and hence we congratulate our North Carolina friends upon their success.

American Medical Association.--The 28th annual session will be held in Chicago, Ill., on Tuesday, June 5, 1877, in Farwell Hall, at 11 A. M. Each State, County and District Medical Society entitled to representation may send one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; *provided*, the number of delegates for any particular State, territory, county or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics.

Secretaries of Societies are requested to forward *at once* to the Secretary of the Association, Dr. Wm B. Atkinson, Philadelphia, lists of delegates and members, with their residences, in order that a correct record may be made of all who are in affiliation with the National Association.

"Papers appropriate to the several Sections, in order to secure consideration and action, must be sent to the Secretary of the appriate Section at least one month before the meeting which is to act upon them."

The following are the Secretaries of Sections: On Practice of Medicine, Materia Medica and Physiology, Dr. B. A. Vaughan, Columbus, Miss.; Obstetrics and Diseases of Women and Children, Dr. Robert Battey, Atlanta, Ga.; Surgery and Anatomy, Dr. Moses Gunn, Chicago; Medical Jurisprudence, Chemistry and Psychology, Dr. E. A. Hildreth, Wheeling, W. Va.; State Medicine and Public Hygiene, Dr. D. R. Wallace, Austin, Texas.

The Maryland Medical Journal, Drs. H. E. T. Manning and T A. Ashby, Editors, Baltimore, is to be a monthly publication of not less than 40 pages, to begin May, 1877. Subscription $3. a year in advance. The Prospectus looks well, reads well. Try the journal a year, and help to build it up should it prove worthy, as we hope it will.

The West Virginia Medical Student is *temporarily* suspended—not form want of support, but because of sickness of the editor and other causes beyond his control.

The Medical Society of North Carolina will convene in Salem on May 24th, 1877. A largely attended and profitable session is anticipated. The Treasurer, Dr. H. T. Bahnsen, of Salem, N. C., is a very important officer with whom members should open correspondence before the session convenes. Dr. James McKee, Raleigh, Secretary; Dr. George A. Foote, Warrenton, President.

Dr. J. Marion Sims will sail for Paris on May 12th. He will enter practice in Paris, and while there will prepare an entirely new edition of his book.

Typographical.—Page 873, March No., in the prescription given by Dr. Flowers, read, of salicylic acid and acetate of potash, ʒiiss, ɨnstead of ʒiiss; 5th line, same page, read fʒij of nitre to ʒvj mixture of the acid soda solution.

Crawford W Long M.D.

DISCOVERER OF ANÆSTHESIA

Horace Wells

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Original Communications.

ART. I.—*The Discovery of Anæsthesia.* By J. MARION SIMS, M. D. New York.

Long before the days of Horace Wells and of Morton and Jackson, we were on the eve of the discovery of anæsthesia. In 1790, Priestley discovered nitrous oxide gas. In 1799, Sir Humphrey Davy experimented with it, and in 1800, he published his *Researches, Chemical and Philosophical, chiefly concerning Nitrous Oxide Gas and its Respiration*, in which he says, "As nitrous oxide, in its extensive operations, appears capable of destroying physical pain, *it may probably be used with advantage during surgical operations*, in which no great effusion of blood takes place." Sir Humphrey Davy had inhaled the gas repeatedly for headache and other painful affections, and finding relief for the time, he suggested its use as an anæsthetic in surgery; and if he had been a surgeon, there is no doubt he would have used it as such. But his great idea was lost to the world for more than forty years.

There are four claimants for the honor of the discovery of anæsthesia, viz: Crawford W. Long, of Athens, Georgia; Horace Wells, of Hartford, Ct.; W. T. G. Morton and Charles T. Jackson, of Boston.

I propose to give a plain statement of facts bearing on the question, leaving the reader to draw his own conclusions.

The claims of Long have never been fairly stated in connec-

tion with those who came after him. I am ashamed to say I was wholly ignorant of them until a very recent day, and I believe that the great mass of the profession are in the same category with me. I became acquainted with the facts of Long's labors by mere accident.

In October, 1876, Dr. P. A. Wilhite, of Anderson, S. C., came to New York to consult me about the health of his daughter. Her case required a surgical operation, and it was necessary for her to take ether, which was given by Dr. Harry Sims. After the operation was over, and while we were waiting to see our patient fully restored from the effects of the anæsthetic, the conversation naturally turned upon the wonders of anæsthesia, when Dr. Wilhite said, "Doctor, I assisted at the first operation ever performed under the influence of ether." I said, "but how could this be when you have never been in Boston, and the first operation ever performed under ether was by Warren, of Boston, in October, 1846, or as some claim, by Marcy, of Hartford, in January, 1845." Dr. Wilhite then told me that he had assisted Dr. Crawford W. Long, of Georgia, in extirpating a tumor from the neck of Mr. Venable, in March, 1842, while he was completely anæsthetized by the inhalation of sulphuric ether—that Mr. Venable was as profoundly anæsthetized as the patient then lying before us—and he also said that he had assisted Dr. Long to operate on other patients under the influence of ether in 1843 and '44, while he was a student of medicine in Dr. Long's office. He declared that Long was the real and original discoverer of anæsthesia, and he believed he would be so acknowledged if all the facts in the case were fully set forth.

He further said that he presumed that he (Dr. Wilhite) was the first person who had ever profoundly etherized any one—and it was under these circumstances. Dr. Wilhite says that from the time he was ten years old (1832), he was familiar with the use of ether by inhalation as an excitant; that the boys and girls in his neighborhood near Athens, Georgia, were in the constant habit of using it; that there was hardly ever a gathering of young people that did not wind up with an ether frolic. Old-fashioned "quiltings" were very common in his day and time,

and in the evening the boys and young men would go to these for the purpose of a dance or an ether frolic.

On one occasion, he met several young people at Mr. Ware's, about five miles west of Athens, at a quilting. The girls and boys all finished the evening by inhaling ether. Some would laugh, some cry, some fight, and some dance, just as when nitrous oxide gas is inhaled. It was in the Fall of 1839. Wilhite was a romping boy of seventeen. All the boys and all the girls had inhaled the ether, some of them more than once. They were looking around for new subjects for it, when Wilhite saw a negro boy at the door, who seemed to be enjoying the sport. Wilhite invited him to come in and try the ether. He refused. Other young men then insisted on his taking it. He refused again in a most positive manner; whereupon some of the thoughtless young men caught hold of the boy, and called Wilhite to give him the ether. He struggled violently, but they threw him down and held him there while Wilhite poured out some ether on a handkerchief, and pressed it firmly over his mouth and nose. He fought furiously. They persisted, thinking it was great fun. After a long struggle, the boy became quiet and unresisting. The young men then let him alone. They were greatly surprised that he did not get up immediately and say or do some foolish thing for them to laugh at. He lay quietly, and with stertorous breathing. They tried to arouse him, but could not. They then became greatly alarmed, and sent one of their number on horseback for Dr. Sydney Reese, at Athens, five miles distant. The messenger rode with all possible speed. He fortunately found Dr. Reese at home, who lost no time in going to Mr. Ware's. On his arrival, he found the negro lying on his back still soundly asleep. The young ladies had left the frightful scene. Young Wilhite, and his principal accomplice, thinking that they had in mere play murdered a fellow being, were so much alarmed, that they contemplated making their escape from the country; but the timely arrival of Dr. Reese soon restored their courage. Dr. Reese heard the history of the transaction. He then threw water in the face of the sleeping negro, slapped him, raised him up, shook him violently, and after a little he was roused to consciousness, greatly to the relief of all present. The Doctor then gave the youngsters a

lecture on the dangers of such frolics, and cautioned them against a repetition of their heedless act. This of course broke up the ether frolics in this neighborhood. Dr. Wilhite thinks it was more than an hour from the time the messenger started for Dr. Reese, till he returned with him to Mr. Ware's. The distance to Athens and back was ten miles, and all this time the negro boy was profoundly narcotized.

This is unquestionably the first case in which sulphuric ether was ever given to the extent of producing complete anæsthesia.

Dr. Crawford W. Long, now of Athens, Georgia, was born in Danielsville, Madison county, Georgia, on the 1st November, 1815. He graduated at the University of Georgia (then the Franklin College) in 1835. He studied medicine and graduated at the Medical Department of the University of Pennsylvania in 1839. He then went to Jefferson, Jackson county, Georgia, where he practised medicine for many years. In 1842, he had four students in his office, viz: P. A. Wilhite, John S. Groves, D. I. Long and H. R. P. Long. The two last were relatives of Dr. Long, and they are both dead. Wilhite and Groves are still living (1877). Dr. Long was 27 years old. His pupils were all from 19 to 21; they were on the best of terms with each other, the Doctor entering into all the sports of his pupils with a hearty good will, while he never neglected his duties as their teacher. On one occasion, they were talking about the inhalation of nitrous oxide gas, when one of his pupils asked him to make some for them. He said he did not have suitable apparatus for it, but that the inhalation of sulphuric ether would produce precisely the same exhilarating effect. One of the young men present said he had inhaled ether while at school, and was willing to do it again. They were all anxious to witness its effects. Dr. Long got some ether immediately and gave it to the young man who had previously inhaled it. He then inhaled it himself, and afterwards gave it to all present. After this, the young Doctor and his pupils indulged occasionally in ether frolics. On several occasions, Dr. Long became furiously excited and could not be controlled. On recovering from the ether intoxication, he frequently noticed that his arms and hands were badly bruised, and yet he was not conscious of having felt any pain at the time he was under the influence of

the ether. He also noticed the same thing in his pupils. They were often badly hurt by falls and blows, and were not conscious of pain at the time These facts, repeatedly observed, suggested to his mind the idea of using ether to prevent the pain of surgical operations. He frequently spoke of this to his students, and at last he determined to give it a trial. Wilhite encouraged him by relating the case of the negro boy he had playfully and unintentionally put under the influence of ether for an hour or more in the Fall of 1839.

Dr. Long having made up his mind to try the experiment with ether on the first favorable opportunity, says (*Southern Medical and Surgical Journal*, Dec., 1849:

"The first patient to whom I administered ether in a surgical operation, was Mr. James M. Venable, who then resided within two miles of Jefferson. Mr. Venable consulted me on several occasions with regard to the propriety of removing two small tumors situated on the back part of his neck, but would postpone from time to time having the operations performed, from dread of pain. At length I mentioned to him the fact of my receiving bruises while under the influence of the vapor of ether, without suffering, and, as I knew him to be fond of, and accustomed to inhale ether, I suggested to him the probability that the operations might be performed without pain, and proposed operating on him while under its influence. He consented to have one tumor removed, and the operation was performed the same day. The ether was given to Mr. Venable on a towel; and when fully under its influence I extirpated the tumor. It was encysted, and about half an inch in diameter. The patient continued to inhale ether during the time of the operation, and when informed it was over, seemed incredulous, till the tumor was shown him. He gave no evidence of suffering during the operation, and assured me, after it was over, that he did not experience the slightest degree of pain from its performance."

This operation was performed on the 30th of March, 1842.

"The second operation I performed upon a patient etherized was on the 6th June, 1842, and was on the same person (Mr. Venable) for the removal of another small tumor. This operation required more time than the first, from the cyst of the tumor having formed adhesions to the surrounding parts. The patient was insensible to pain during the operation, until the last attachment of the cyst was separated, when he exhibited signs of slight suffering, but asserted after the operation was

over that the sensation of pain was so slight as scarcely to be perceived. In this operation, the inhalation of ether ceased before the first incision was made."

In a certificate sworn to by James M. Venable on the 23d July, 1849, he says: "In the early part of the year (1842), the young men of Jefferson and the country adjoining were in the habit of inhaling ether for its exhilarating powers, and I inhaled it myself frequently for that purpose, and was very fond of its use. While attending the Academy, I was frequently in the office of Dr. C. W. Long, and having two tumors on the side and rather back of my neck, I several times spoke to him about the propriety of cutting them out, but postponed the operation from time to time. On one occasion, we had some conversation about the probability that the tumors might be cut out while I was under the influence of sulphuric ether, without my experiencing pain, and he proposed operating on me while under its influence. I agreed to have one tumor cut out, and had the opration performed that evening (afternoon) after school was dismissed. This was in the early part of the spring of 1842. I commenced inhaling the ether before the operation was commenced, and continued it until the operation was over. I did not feel the slightest pain from the operation, and could not believe the tumor was removed until it was shown to me. A month or two after this time, Dr. C. W. Long cut out the other tumor situated on the same side of my neck. In this operation, I did not feel the least pain until the last cut was made, when I felt a little pain. In this operation, I stopped inhaling the ether before the operation was finished. I inhaled the ether in both instances from a towel, which was the common method of taking it."

Dr. Long's four students Wilhite, Groves, and the two Longs, also E. S. Rawls (now Dr. Rawls) and Andrew J. Thurmond, were present and assisted at the operation. Dr. Wilhite tells me that the etherization of Venable was as complete as it is ever made now-a-days, and that Venable always declared he felt no pain during the operation.

On the 3d July, 1842, Dr. Long amputated the toe of a negro boy, Jack, belonging to Mrs. Hemphill. Jack felt no pain, having been completely anæsthetized.

On the 9th September, 1843, Dr. Long exsected, without pain, three small cystic tumors from the head of Mrs. Mary Vincent, who was etherized for the purpose.

On the 8th January, 1845, Dr. Long amputated two fingers for a negro boy belonging to Mr. Ralph Bailey, Sr., the patient being fully etherized and feeling no pain whatever.

Morton's friends have been from the outset clamorous and persistent in proclaiming to the world "that Morton was the first man who ever produced complete anæsthesia for surgical operations." The facts above stated prove incontestably that they were mistaken; and before we get through it will be shown that they were doubly mistaken; for it will be established beyond controversy that Wells produced anæsthesia by nitrous oxide gas long before Morton did it with ether.

Long's anæsthesia with sulphuric ether was on the 30th March, 1842.

Wells' anæsthesia with nitrous oxide gas was on the 11th December, 1844.

Morton's anæsthesia with sulphuric ether was on the 30th September, 1846.

Thus we see that Long ante-dates Wells two years and eight months, and ante-dates Morton four years and six months.

Dr. Long's operations under the influence of ether were known by all his neighbors—professional and non-professional. Many of these are still living. Dr. Wilhite lives at Anderson, South Carolina. Dr. John S. Groves, his fellow-student with Long in 1842, is now living at Dalton, Georgia. Dr. A. Delaperiere was the only physician, besides Dr. Long, at Jefferson in 1842. He witnessed these operations; has given his testimony to that effect, and is still living. Dr. E. S. Rawls, another witness, was living in Alabama a short time ago. All these men testify to the fact that Long's operations under ether were witnessed and known by all medical men in his neighborhood and by the whole community.

Long's operations were not secret. He made no mystery about the substance given to prevent pain. He took out no patent for his discovery as did Morton and Jackson. He did not attempt to convert it into a money speculation. He published it before all men. It was not hidden from the world.

True, his was a very contracted world. He was waiting to test his great discovery in some capital operation. He lived in an obscure little town where there were no railroads and no ponderous machinery to maim his fellow-men and the amputation of a leg or arm was an era in the life of a country doctor.

While he was still waiting for larger operations before communicating his discovery to some scientific journal, the labors of Wells and Morton and Jackson and Simpson burst upon the world. When Jackson made his visit to Long at Athens, in March, 1854, he said to Long: "You have the advantage of priority in date and in the first use of ether as an anæsthetic; but we have the advantage of priority of publication."

Now upon this point Long, Wells, Morton and Jackson stand individually upon the same level. Long exhibited to medical men and to the community his operations under ether (1842). Wells exhibited to medical men and to the community his operation of the extraction of teeth under the influence of nitrous oxide gas (1844). Morton exhibited to medical men and to the community the use of his secret remedy, "Letheon," 1846 as an anæsthetic. But Morton was fortunate in showing his patent remedy to the great surgeons of Boston. And it was not Morton, but it was Warren and Hayward and Bigelow who performed the operations at the Massachusetts General Hospital (October, 1846,) on patients to whom Morton gave his "Letheon" that the world owes the immediate and universal use of anæsthesia in surgery. If Morton could have had his way he would have deodorized the ether and kept it a secret from the world.

Neither Wells nor Morton nor Jackson ever published a word on the subject till it burst forth in a blaze from the labors of the hospital surgeons already named.

When Warren and Hayward and Bigelow proved the real greatness of the discovery, then it was that Wells, Morton and Jackson began the war of pamphlets, and not till then did either of them publish in any scientific journal a line about anæsthesia. And thus we see that its first publication to the world was really due to the illustrious surgeons of the Massachusetts General Hospital.

In 1853 Morton petitioned Congress to grant him a large sum of money for the discovery of anæsthesia. The friends of Wells

opposed it, and claimed this honor for Wells, who used nitrous oxide gas as an anæsthetic two years and a half before Morton used ether for this purpose.

Then it was that the friends of Long appeared upon the scene, proving that Long was the first to use ether, antedating Morton four years and a half.

When Long's claim to the honor of discovering anæsthesia was presented to Congress by the Hon. Mr. Dawson, Senator from Georgia, it was formidable enough to block the movements of Morton to get the appropriation he demanded for his discovery. They were so strong that Dr. Charles T. Jackson went to Athens, Georgia, expressly to see Dr. Long on the subject. In a communication to the Boston *Medical and Surgical Journal* April 11th, 1861, Dr. Charles T. Jackson says he visited Dr. Long at Athens, Georgia, on March 8th, 1854, to examine into Dr. Long's claims to being the first to use sulphuric ether as an anæsthetic in surgery, and he further says; "From the documents shown me by Dr. Long, it appears that he employed sulphuric ether as an anæsthetic agent—

First. On March 30th, 1842, when he extirpated a small glandular tumor from the neck of James M. Venable, a boy [Mr. Venable was over 21 years old when the operation was performed.—J. M. S.] in Jefferson, Georgia, now dead.

Second. On July 3d, 1842, in the amputation of the toe of a negro boy belonging to Mrs. Hemphill, of Jackson, Georgia.

Third. On September 9th, 1843, in the exterpation of a tumor from the head of Mary Vincent, of Jackson, Georgia.

Fourth. On January 8th, 1845, in the amputation of a finger of a negro boy belonging to Ralph Baily, of Jackson, Georgia.

Copies of the letters and depositions proving these operations with ether were all shown me by Dr. Long.

He also referred me to physicians in Jefferson who knew of the operations at the time."

The above extract from Dr. Jackson's paper to the Boston *Medical Journal* recognizes Long's claim to being the first to produce anæsthesia for surgical operations, but it does not tell the whole story of Dr. Jackson's visit to Dr. Long.

Dr. Long has furnished me with all the evidence, consisting of affidavits, certificates, book entries, &c., that Dr. Jackson ex-

amined. He has also written me fully on the subject, and every fact that I have stated can be substantiated by documentary evidence.

In one of Dr. Long's letters to me (Nov. 5, 1876), he says:

"In 1854 Dr. Charles T. Jackson came to Georgia and spent two days with me in Athens, most of the time in my office, examining books, accounts, dates and certificates establishing the time, &c., of my operations. He expressed himself satisfied with the correctness of my claim to the first use of ether as an anæsthetic in surgical operations. Dr. Jackson informed me that he would go from Athens to Dahlonega, Georgia, and as I knew he must pass through Jefferson where I resided up to 1850, and where my first operations under ether were performed, I requested him to stop in Jefferson and see some of the physicians there who witnessed or knew of the operations, and also a number of the citizens of the village who either witnessed the operations or were familiar with them from common report. Dr. Jackson spent one or more days in Jefferson, and on his return, expressed himself satisfied with the testimony."

"In Dr. Jackson's communication to the Boston *Medical and Surgical Journal* (April 11th, 1861), he neglected to say anything of the information he obtained while in Jefferson, although he admitted to me on his return that the evidence was perfectly satisfactory."

The Hon. C. W. Andrews, of Madison, Georgia, informs me that he was in Dr. Long's employ and in his office when Dr. Jackson spent a whole day with Long in comparing notes and talking over the subject of etherization, and it seems that the real object of Dr. Jackson's visit to Dr. Long was to induce Long to unite with him in laying their conjoint claims before Congress as the real discoverers of anæsthesia as opposed to those of Morton. Jackson was willing to concede to Long the honor of being the first to use ether in surgical operations, but wished Long to concede to him the honor of priority in making the discovery of the principle of anæsthesia when he inhaled ether to relieve the pain and difficulty of breathing after inhaling chlorine gas (as Sir Humphrey Davy had done before).

Dr. Long says (February 8th, 1877): "In our conversation I understood Dr. Jackson to yield the point of priority to me—

and so did the Hon. C. W. Andrews. I did not admit to him that he was the first to make the discovery—leaving to me its practical application; and when he proposed to me to unite our claims—he to claim the discovery and I its first practical use in surgical operations—I positively refused. I was satisfied that I was entitled to the credit of the discovery, as well as of the first practical use of ether in surgical operations."

"Instead of writing to Senator Dawson to unite our claims as Dr. Jackson requested, I wrote to Mr. Dawson to make no such compromise, but to place my claims solely on their merits; and if you will consult the Congressional proceedings of that time you will see that Mr. Dawson presented my claims separate and independent."

Now let us see how the followers of Long worked out the problem of anæsthesia without any knowledge whatever of his labors.

Horace Wells, a native of Hartford, Windsor county, Vermont, studied dentistry in Boston, and at the age of 21 (1836) he opened an office in Hartford, Connecticut, to practice his profession. His mind was early turned to the subject of preventing pain in the extraction of teeth. In August, 1840, Dr. L. P. Brockett, of Brooklyn, N. Y., then a medical student, went to Wells to have a molar tooth extracted; the operation was difficult, and so painful that Wells said that there ought to be some method of mitigating such suffering, and that he thought a man might be made so drunk by the inhalation of nitrous oxide gas as to prevent the pain of dental and other operations. This shows how deeply impressed this subject was upon the mind of Wells at that early day. On December 10, 1844, Mr. G. Q. Colton delivered a lecture in Hartford, Conn., on "laughing gas," and after the lecture he administered the gas to Wells and several other gentlemen. One of them (Mr. Cooley), while under its influence, fell over some benches, and was evidently badly injured; when he returned to consciousness, Wells rushed up to him and inquired if he was hurt. He replied, "No." Wells then said, "You must have been hurt, for you struck your legs against the benches." The young man then, at Wells's suggestion, pulled up his pantaloons; the blood was running down his legs and his knees were badly injured. When again questioned

by Wells, he said, "I did not feel any pain at the time." Wells then turned to a friend (Mr. David Clarke), who was near by, and an eye witness to all this, and remarked, "I believe a man by taking that gas could have a tooth extracted or a limb amputated and not feel the pain." So thoroughly was Wells convinced of this fact that he told his wife on their way home that he intended to take the gas the next day and have a tooth extracted. On arriving home, he left his wife and went to see his friend, Dr. Riggs, to announce his great discovery, and his intention to take the gas for the extraction of a tooth. Riggs tried to dissuade him from it, but his mind was made up, and he said, "As the young man did not feel pain at the time he was hurt, why cannot the gas be used in the extraction of teeth?" Early next morning (December 11) Wells called on Colton and engaged him to go to his office at ten o'clock and give him the gas. He did so, and Dr. Riggs extracted a large molar tooth for Wells while under the influence of the gas. Wells did not seem to feel any pain. He remained unconscious for a few moments, and on coming to, he exclaimed, "A new era in tooth-pulling! It did not hurt me more than the prick of a pin. It is the greatest discovery ever made."

From that moment Wells's enthusiasm was unbounded. He immediately began the administration of the gas, and daily extracted teeth under its influence; and other dentists in Hartford adopted the same practice with like success. Dr. Marcy, then of Hartford, on witnessing Wells's operations, told him that when a student at Amherst College, he, with other students had, for amusement, often inhaled nitrous oxide gas and also the vapor of sulphuric ether, and that the effects of the two were identical; and he suggested to Wells to try ether as a substitute, for the gas. On this hint Wells tried it. He inhaled it himself, and he says, "I found it very difficult to inhale the vapor of ether, in consequence of the choking sensation. For this reason, and for the reason that Dr. Marcy and myself came to the conclusion that nitrous oxide gas was not so liable to do injury, I resolved to adhere to this alone."

About a month after the discovery of anæsthesia by Wells, Dr. Marcy (January, 1845) gave the vapor of sulphuric ether to a sailor for the extirpation of a small wen on the side of his

head. The patient was insensible and the operation successful, but Marcy, after this experiment, still advised Wells to stick to the gas as being more agreeable, and, perhaps, safer than ether. Wells continued the use of the gas, and the dentists (Riggs, Terry, Braddock, and Crowfoot) and the doctors in Hartford were all convinced of its value as an anæsthetic. But Wells felt that his great discovery should be laid more broadly before the profession and the world, and early in 1845 went to Boston for this purpose. Through his former pupil and partner, Dr. Morton, dentist, he was introduced to Dr. John C. Warren, Dr. Charles T. Jackson. Dr. Hayward, and others. Dr. Warren received him kindly, and Wells remained in Boston several days with the expectation of giving the gas to a man who was to submit to an amputation at the hands of Dr. Warren. For some cause the operation was postponed. Wells was then invited to address the class at the medical college on the subject. He did so at some length, and then administered the gas for the extraction of a tooth. Unfortunately, the gas-bag was removed too soon ; the patient was not sufficiently anæsthetized ; he screamed out, and said he felt the pain of extraction, and the experiment was therefore a failure. Wells was hooted at, and unfeelingly hissed out of the amphitheatre by the thoughtless young men present, and he was pronounced a charlatan and his anæsthetic a humbug. He returned home greatly mortified at his failure, was taken suddenly ill and did not recover his health for many weeks.

In 1841–42, Morton was a pupil of Wells. In 1843, Wells established Morton in Boston, and for a while was his partner. In 1845–46, after Wells's discovery of anæsthesia, by the use of nitrous oxide gas, they had frequent interviews, sometimes in Boston and sometimes in Hartford. After Wells' unfortunate visit to Boston, Morton became greatly interested in the subject of anæsthesia. Notwithstanding Wells' failure in Boston, Morton subsequently witnessed his continued success with the gas in Hartford, and was anxious to try it again in Boston. During one of his visits to Wells in Hartford in 1846, Morton asked Wells to show him how to make the gas. Wells not having time, referred him to Dr. Chas. T. Jackson to make it for him, as he was a chemist. On returning home, Mor-

ton called on Jackson for this purpose. Jackson told Morton that the manufacture of nitrous oxide gas required some nicety of manipulation, that there was danger of his getting nitric instead of nitrous oxide, and that he was too busy at that time to make it for him. Morton explained that he wished to use it to render patients insensible for the extraction of teeth. Jackson then told him to use the vapor of sulphuric ether, saying that it was perfectly safe, could be easily procured, and that the students at Cambridge often inhaled it for amusement.

On the evening of the day (September 30, 1846,) that Morton had this interview with Jackson, he gave the ether to a patient, and extracted a tooth without pain; and on October 16 he gave it in the Massachusetts General Hospital to a patient who had a tumor exsected from the neck by Dr. John C. Warren. On the next day (October 17), he gave it to another patient for Dr. Hayward, who exsected a tumor from the arm. He gave it also for Dr. Bigelow with equal success; and from that time it came rapidly into use by the whole profession throughout the civilized world. On October 27, 1846, Jackson and Morton published to the world, by letters patent, the discovery of *letheon* as an anæsthetic, but it was seen at once that their letheon was nothing more or less than pure sulphuric ether. Jackson soon resigned his interest in the patent to Morton, and sent a communication to the French Institute claiming the honor for himself of the discovery of anæsthesia by ether. Morton then set up his claim as the real discoverer, giving Jackson credit only for some unimportant suggestions. While Jackson and Morton were sending bulletins to the Institute of France, Wells sailed for Europe in December, 1846, to lay his claims before the French Institute as the real discoverer of anæsthesia. His mission was a failure, and he returned home in March, 1847, to prepare the documents upon which his claim was to be presented to the Institute. And thus this tripartite war was waged with great fury, Morton and Jackson denying everything to Wells, and denying everything to each other. They denied that nitrous oxide gas had any anæsthetic properties. Wells brought forward his Hartford experience, and he gave the gas for surgeons in general practice, proving that prolonged operations could be performed under its influence. Dr. Marcy exsected a large gland, the patient being under the gas

for fifteen minutes; Dr. Ellsworth amputated a thigh; and Dr. Berresford exsected a large tumor under its influence—all in Hartford. But notwithstanding all this, Wells saw nitrous oxide gas supplanted by sulphuric ether as an anæsthetic—ether which he had tried and rejected. He saw his claims as the great discoverer of anæsthesia unrecognized abroad, disputed and set aside at home, and he was disappointed and dispirited. He then went to New York to lay his claims as the discoverer of anæsthesia before the profession of the great metropolis. Soon after his arrival in New York, he showed signs of mental aberration, and on January 14, 1848, in a fit of madness, he ended his life with his own hands.

A few years after the death of Wells, Morton applied to Congress for a grant of money for the discovery of anæsthesia (1853). The friends of Wells opposed the grant on the ground that Wells was the real discoverer. Then it was that the friends of Long came to the front and opposed the claims of Morton, on the ground that Long was the first discoverer of anæsthesia. The Mortonites admitted that Long was the first to use ether as an anæsthetic, and the first to perform operations under its influence, but they urged that Long's claims were invalid, because he had not published his discovery in some scientific paper. They admitted that Wells tried to make the discovery, but asserted that he failed, because nitrous oxide gas could not produce insensibility to pain. They even attempted to prove this before a Congressional committee appointed for this purpose. Morton declared that nitrous oxide gas never had, and never could, produce the effect claimed by Wells. To disprove this assertion, Prof. John Frederick May, of Washington, went before the Congressional committee and demonstrated the fact that nitrous oxide gas, given according to Wells' plan, could and did produce insensibility to pain.

If nitrous oxide gas can produce insensibility to pain, as Wells claimed, then Wells demonstrated the fact that anæsthesia can be produced by the inhalation of this gas. Let us see how curiously, how providentially, this question has been settled, and settled to the satisfaction of all unprejudiced minds. Colton seems to have been incidentally an important agent in establishing the truth. We have seen how Wells' discovery grew out of

Colton's lecture in Hartford in December, 1844. Colton continued his popular lectures on this subject for many years after this. In 1862, he lectured in the town of New Britain, Conn., and, as usual, related how the great discovery of anæsthesia by the use of nitrous oxide gas was made, giving Wells the honor. An old lady present wished to have some teeth extracted; she was afraid to take ether or chloroform, and she requested her dentist, Dr. Dunham, to get Colton to give her the gas for their extraction. He did so, and taught Dr. Dunham how to make the gas. One year after this (1863), Colton returned to New Britain on his usual annual lecture-tour, and he found Dunham extensively engaged in extracting teeth under the influence of the gas. Colton then seeing that the extraction of teeth under the influence of the nitrous oxide gas could be made a painless and paying business, induced Dunham to go with him to New Haven, with the understanding that Colton was to lecture and give the gas, and Dunham to extract teeth. After the first day, Dunham returned home, and Dr. Smith, of New Haven, took his place, and in a few weeks people came by hundreds to take the gas and get teeth extracted. This experiment convinced Colton that it could be made a great business in a larger field, and he went to New York and opened the Colton Dental Institute, where, since 1863, he and his agents have given the gas to 97,000 persons without an accident.

All this disproves the assertion made by Morton and his adherents. If nitrous oxide gas produces anæsthesia to-day in the hands of Colton and others, it did it in the hands of Wells in 1844, and Wells therefore preceded Morton in the discovery of anæsthesia. Nitrous oxide gas has been used in general surgery by many eminent surgeons in New York, Philadelphia, Baltimore and elsewhere. It has been used successfully in New York by James R. Wood, Carnochan and others. The writer has used it in difficult and prolonged operations (ovariotomy), requiring thirty, forty, fifty-seven and sixty minutes, and in one case one hour and fifty minutes, and always with the most satisfactory results. And this goes to prove that Wells was right in claiming precedence over Morton in the discovery of anæsthesia by nitrous oxide gas in 1844.

Now let us summarize the facts set forth in the foregoing historic sketch. We know,

1st. That since 1800, the inhalation of nitrous oxide gas produced a peculiar intoxication, and even allayed headache and other minor pains.

2d. That Sir Humphrey Davy proposed it as an anæsthetic in surgical operations.

3d. That for more than fifty years the inhalation of sulphuric ether has been practised by the students in our New England Colleges as an excitant, and that its exhilarating properties are similar to those of nitrous oxide gas.

4th. That the inhalation of sulphuric ether, as an excitant, was common in some parts of Georgia forty-five years ago, though not practised in the colleges.

5th. That Wilhite was the first man to produce profound anæsthesia, which was done accidentally with sulphuric ether in 1839.

6th. That Long was the first man to intentionally produce anæsthesia for surgical operations, and that this was done with sulphuric ether in 1842.

7th. That Long did not by accident hit upon it, but that he reasoned it out in a philosophic and logical manner.

8th. That Wells, without any knowledge of Long's labors, demonstrated in the same philosophic way, the great principle of anæsthesia by the use of nitrous oxide gas (1844).

9th. That Morton intended to follow Wells in using the gas as an anæsthetic in dentistry, and for this purpose asked Wells to show him how to make the gas (1846).

10th. That Wells referred Morton to Jackson for this purpose, as Jackson was known to be a scientific man and an able chemist.

11th. That Morton called on Jackson for information on the subject, and that Jackson told Morton to use sulphuric ether instead of nitrous oxide gas, as it was known to possess the same properties, was as safe, and easier to get.

12th. That Morton, acting upon Jackson's off-hand suggestion, used the ether successfully in the extraction of teeth (1846).

13th. That Warren and Hayward and Bigelow performed important surgical operations in the Massachusetts General Hospi-

tal (October, 1846), on patients etherized by Morton. and that this introduced and popularized the practice throughout the world.

In Boston, Mass., a monument has been erected to the discoverer of anæsthesia, but no man is designated thereon by name. The citizens of Hartford, Conn., have erected a bronze statue of Wells (by Bartlett) in their Capitol Park, claiming for him the discovery of anæsthesia. This is as it should be. We have no objection to it; and would suggest that the names of Long, Wells, Morton and Jackson be inscribed on the Boston column, one on each side, as co-discoverers of anæsthesia. The State of Georgia will, at no distant day, erect at its Capitol or its University, a statue of Long, who was unquestionably the first discoverer of anæsthesia.

All the claimants of the honor of discovering anæsthesia are Americans. To each is due a certain measure of credit, but no one man can claim this great honor exclusively. The names of Long, Wells, Morton and Jackson will doubtless be associated as co-laborers in the great work, and to these must be added the immortal name of Sir James Y. Simpson, who introduced chloroform and enlarged the domain of anæsthesia.

Sir James received the highest honor from his government in recognition of the great service he had rendered humanity. I wish we could say the same of our benefactors and government. Our great republic leaves our discoverers and scientists to rest in obscurity and to starve.

Long lost his all during our great civil war, and in his old age he is now being worked to death for the daily bread necessary to support himself and family.

The fate of Wells, Morton and Jackson is most pitiable.

Wells, disappointed in carrying off the honor of the great discovery of anæsthesia, became insane and committed suicide in New York in 1848.

Morton, disappointed at not receiving a pecuniary recognition from Congress for his labors, fretted himself into a congestion of the brain. In July, 1868, he returned to New York from Washington in the wildest state of excitement. Fatigue, anxiety and sleepless nights had exhausted his vital powers. Dr.

Lewis A. Sayre and Dr. Yale were called to him on the 15th July. They considered his condition as critical, placed him in the hands of a trained nurse, ordered leeches to his temples, cups on the spine, and ice to his head. Dr. Morton would not submit to treatment. As soon as Dr. Sayre left, he ordered his buggy to go to the Riverside hotel, saying he knew he would soon be well if he could get out of the hot city. He drove furiously up Broadway, and through the Central Park. At the upper end of the Park, he leaped from his buggy, and ran to a lake near by to cool his burning brain. Being persuaded to get into his buggy again, he drove a short distance, then leaped out, and jumping over a fence, he fell down in a state of insensibility. He was then taken moribund to St. Luke's Hospital, where he died an hour or two later.

Jackson has been for some time in an insane asylum, hopelessly incurable.

How mournful the fate of these remarkable men! How sad to think that their lives were embittered with envy, jealousy and uncharitableness towards each other! Let us forget their faults, and remember only the good that has resulted from their labors.

It is said that "The evil that men do lives after them." But here the good that these men did will live after them, and live forever.

Vaccination is perhaps the greatest boon ever conferred by science on humanity. Anæsthesia is the next. England gave us the one. America the other. England recognized the labors of Jenner, not, however, in a manner commensurate with the magnitude of his work. America should recognize the labors of Long, Wells, Morton, and Jackson, if not in a manner commensurate with the value of their work, at least to such an extent as to relieve the necessities of their several families, thereby proving that Republics are not always ungrateful. Government aid, voluntarily tendered at this time, would be acceptable to all of them, for they are all really in need of it. Each of these families ought to receive at least one hundred thousand dollars.

I propose, then, that the whole medical profession, North, South, East and West, unite in asking Congress, at its next ses-

sion, to appropriate this sum, as an anæsthesia fund, to be divided equally between the families of Long, Wells, Morton, and Jackson.

One hundred thousand dollars is a small sum to offer where men have sacrificed their lives for the good of the whole civilized world, leaving their families in straightened circumstances. How small this pittance when measured by the benefits these men conferred on the world!

Let us, as Americans, rise above all party, all prejudice, all sectionalism, and demand of the Government this appropriation for the great work accomplished by these martyrs to science and humanity.

ART. II.—*Puerperal Eclampsia and Milk Diet.* By H. OTIS HYATT, M. D., Kinston, N. C.

I imagine that it is quite rare for a doctor to attend a patient during two successive attacks of puerperal convulsions, and carry her successfully through a third pregnancy without an abnormal symptom, save the presence of albumen in the urine during the early months of gestation. I offer this as an excuse for reporting the details of the following case, which to me has been instructive and profitable. Not being much of a theorist, I shall have very little comment to make on the pathological condition of my patient during her several pregnancies, but will confine myself mostly to a simple statement of facts in regard to the case.

Aug. 5, 1874. I was called in consultation by Dr. Weyher to see Mrs. H———, a very large, fleshy woman, aged 27, who was five and a half months advanced in her second pregnancy. She had been troubled for several days with headache, sleeplessness, flushings of the face and nausea, bowels costive. She was very nervous and apprehensive, and was anticipating an attack of puerperal convulsions. During her previous pregnancy (which was her first) she had eclampsia about the time she was five months gone, and came very near dying. She was attended by a physician who has since died; it was for this reason that I was unable to get the details of the manner of attack or length of time the convulsions lasted. We examined her urine, and found it to contain albumen in large quantities. Dr. Weyher did not care to take charge of the case from the fact that at this

time he was gradually dropping off his patients preparatory to quitting the practice, and did not care to be troubled with her; so he turned her over to me.

She was so much alarmed that we tried to persuade her there was no great need of being so frightened, but did not succeed in quieting her fears. Prescribed a purgative and large doses of bromide of potassium as often as necessary, to control her headache and nervousness. The bromide quieted her and she had a good night's sleep.

The following day at noon she was seized with convulsions, and had several in rapid succession. We were immediately sent for, and as soon as we arrived made a careful examination of the uterus, but could find no evidence that labor had set in. The convulsions were appearing so rapidly, and were so prolonged, that we considered that it would be jeopardizing her life to wait longer before we emptied the uterus. Therefore we determined to induce labor, and if need be, deliver her by artificial means. For this purpose we had her brought under the influence of chloroform, with a two-fold object in view: first, to arrest the convulsions; and secondly, to annul the pain and prevent her from becoming frightened while we were dilating the os. I forced my fore-finger through the os, and as soon as it was sufficiently dilated, introduced a small size Barnes' dilator. Finding that the dilator did not work satisfactorily but continued to slip out of place, we improvised a dilator, to which we had frequently resorted with much satisfaction. It was made in this manner: a couple of condoms were passed one into the other, and afterwards tied over the vaginal nozzle of a Davidson syringe—two condoms being used to make the dilator sufficiently strong. The dilator thus constructed acted very efficiently and could be easily held in place. Within an hour we had dilated the os to the extent of a silver quarter of a dollar and brought on expulsive pains. At this time the fœtus was unmistakably presenting by the head—I having passed a couple of fingers through the cervix and felt it distinctly. We were then called off and returned after an absence of an hour, during which time she had another convulsion. To our surprise, we found the vagina very much distended by the bag of waters. These we ruptured, and discovered that the os was not more dilated than it was before we left, an hour previous; but the fœtus was presenting by the feet—spontaneous version having taken place during our absence. At the expiration of another two hours we were able to deliver her, having to use considerable force to bring the head through the cervix. The placenta in a little while was expelled naturally. Shortly after delivery, she had

another convulsion and continued to have others occasionally for the next two days, requiring the constant presence of an attendant with chloroform. The convulsions were generally warded off if the chloroform was applied to her face as soon as it began to get purple, but after her delivery she was regarded by her friends as out of danger, and it was for this reason that her face was not watched as carefully as it might have been; consequently, when the attendants were not expecting it, she would have a convulsion. Her convalescence was normal, with the exception of a slight bronchial catarrh, which was probably produced by the long continued and frequent use of chloroform.

On the morning of September 16th, 1875, I was again sent for to see Mrs. H——. She was just five months advanced in pregnancy, very much excited and said she was sure she was going to have convulsions. I attempted to quiet her fears, prescribed a purgative, gave her large doses of bromide of potassium, and enjoined rest in bed. I carried a bottle of her urine to my office for chemical examination and found it loaded with albumen. In the afternoon I received a message stating that Mrs. H—— had had a convulsion, and to come immediately. By the time I arrived the convulsion had passed off. I examined her and found no sign of uterine action. Taking into consideration my past experience with this lady, I concluded that it would be useless to temporize; so I brought her under chloroform, and directed her to be kept under it just short of complete anæsthesia. I dilated the os by means of my fore-finger and a Barnes' dilator, and at the expiration of an hour it was dilated to the extent of an inch in diameter, when she was suddenly, and without warning, seized with a violent convulsion. During the convulsion the dilator was expelled from the uterus and the vagina became distended by the bag of waters which glided through the small os, indicating that strong uterine contractions took place during the convulsion. This would, it seems, explain the reason why the bag of waters was forced into the vagina during her previous labor and why spontaneous version occurred during my absence. She was kept under chloroform, and the labor completed as soon as possible, which was about two hours from the time she had her second convulsion, making in all three hours from the time I commenced to dilate the os. The placenta was expelled spontaneously. Her convalescence was normal and without a bad symptom.

In March, 1876, Mrs. H—— again became pregnant and was more than ever alarmed at her condition. Her husband applied to me frequently and urged me for mercy's sake to give him something to bring his wife all-right, saying that he was very much

afraid that his wife would die, and that her former experience was proof conclusive that she could not carry a child to full term. I was somewhat apprehensive myself, but determined to act as I had done heretofore, wait until the convulsions supervened before I resorted to any active measures; and in the meantime I would try to carry her through to full term by regulating her diet and attending to her surroundings. When she was two and a half months advanced, her husband brought me a specimen of her urine which I examined; it contained albumen in large quantities. I directed her to live on milk entirely, to keep her bowels open, and eat no other food if she could possibly avoid it. In a few days the albumen disappeared from the urine; her general health became good, and she went to full term without a single bad symptom.

December 15, 1876, I was called to attend her in labor. The labor was easy, quick, and natural. There was not the least tendency to eclampsia. She remarked that this was the first time she had ever been conscious of a labor pain; it had always so happened during her three previous pregnancies that she was unconscious during the time the pains came on. The first stage of labor lasted two hours; second occupied only a few minutes. The child was very small and a female. The position was left occipito-anterior; the placenta was adherent, necessitating the introduction of the hand for its removal. Her convalescence was normal; uterine involution perfect. She has since enjoyed most excellent health.

In considering the foregoing case, the question naturally arises, Why was it that this lady had albuminuria during the early months of four successive pregnancies? Why was it that by the time she was five or five and a half months advanced she had eclampsia? In what manner did the milk diet so act as to cause the disappearance of albumen from the urine and prevent the occurrence of convulsions? Of course we cannot say positively that this patient would have had eclampsia in this, her fourth pregnancy, simply because she had them three times before. This kind of argument would savour too much of the "post hoc, propter hoc;" but the presence of albumen in the urine of this patient, together with the fact that she did have the convulsions in her former pregnancies, afford rather strong presumptive evidence that she would have had other convulsions this time if she had not been put on milk diet.

This case to me, at least, has been a very curious and interest-

ing one throughout. There are many points in connection with it that are, I think, unusual. The early appearance of albumen in the urine is said by Fordyce Barker to rarely occur before the sixth month of utero-gestation. The early appearance of convulsions, and each time without any indication of the commencement of labor, is also unusual. On looking over the literature of puerperal albuminuria, I regret to say that I have not found anything that gives us a satisfactory explanation of this phenomenon. It has recently been demonstrated by Robin, that the albumen of the blood is not identical with urinary albumen, and that the albumen of Bright's disease is different from the temporary albuminuria of pregnancy. The albumen of Bright's disease, when brought in contact with the oxide of copper, assumes a beautiful reddish-violet color; while the urinary albumen of pregnancy, though it readily coagulates by heat, and nitric acid, does not exhibit any such change of color when treated in like manner. It may be that the albumen of pregnancy is identical with the albumen which so often appears in the urine after scarlet fever, or the albumen which is almost sure to appear in the urine after a heavy fall upon the buttocks. I have not had an opportunity recently to investigate the subject, but would suggest to the reader of the *Monthly* that it is worthy of investigation and might lead to something practical.

This woman's pelvis was very much larger in all its diameters than that of the average female, and it may be that her uterus, instead of rising up into the abdomen after three months, continued in the pelvic cavity; and as it increased in size pressed upon the ganglia of the sympathetic, which are situated in front of the lumbar vertebræ. Dr. Robert Lee states that these ganglia are very much enlarged, both in pathological and physiological enlargement of the uterus. Claude Bernard has demonstrated that, besides the sensory and motor nerves which issue from the spinal cord, there is a third set, either proceeding directly from the sympathetic, or through it from the cerebro-spinal system—whose office it is to preside over the contraction of the vessels. Vulpian and Schiff have proven that there are two sets of vaso-motor nerves—one set to dilate, and the other to contract the blood-vessels. The normal tonicity of an artery is kept up when these vaso-motorial

agents are in a normal condition; and when there is any disturbance of either, we have what used to be called passive congestion, or anæmia as the case may be—the anæmia being produced when there is a weakness or paralysis of the dilator nerves, and passive congestion, so called, whenever there is weakness or paralysis of the constrictor nerves.

The recent experiments of Schiff give us some convincing facts in regard to the existence of these dilator nerves. He has found that all erectile organs are supplied with nerves, the stimulation of which is followed by an increased flow of blood into the erectile tissue.

It is true that all cases of puerperal albuminuria do not lead to eclampsia, and that we frequently observe eclampsia without a trace of albumen in the urine. Nevertheless, the frequent association of albuminuria with eclampsia leads us to look for a cause which would produce either condition. Eclampsia often occurs without the presence of albumen in the urine, which is sufficient to overthrow the theory of Frerich's, that it is caused by uræmia. "Traube and Munk have shown us that when œdema of the brain is occasioned by an increased quantity of serum contained in the blood, and by tension produced in the arterial system, and is succeeded by anæmia of the brain, coma sets in, and later convulsions ensue as soon as this anæmia extends from the hemispheres to the mesocephalon. The existence of two causative agents have been thus established—anæmia and increased tension of the arterial system; and two conditions of the brain are also shown to be associated with eclampsia—at first the cerebral œdema, and subsequently anæmia, particularly of the mesocephalon. But whether Frerich's or Traube's theory is correct, the result can be only attained through the vaso-motor system by some irritation which overcomes the antagonism between the *constrictor* and *dilator* vaso-motorial agents allowing the dilators the preponderance of power."*

It seems to me, with the facts before us, that we can satisfactorily account for the occurrence of puerperal eclampsia. Pressure upon the ganglia situated in front of the sacral foramina which (the ganglia) undergo a marked increase in size during

* Brown. *Am. Journal Obstet.*, Jan., 1877, p. 44.

pathological and physiological enlargement of the uterus is no doubt the primary disturbing cause. This leads to a disturbance of balance between the vaso-motorial agents. This is often manifested by an appearance of albumen in the urine; for if from any disturbing cause the constrictor power of the vaso-motor nerve is removed from the arteries of the kidneys, we have increased flow of blood to the parts accompanied by a relaxation of the walls of the blood-vessels which places the kidneys in a condition to eliminate a great portion of the albumen of the blood as it passes through them. If, instead of the vaso-motor nerves of the kidneys becoming disturbed, the disturbance takes place in the vessels of the brain or spinal marrow, we may, it seems, have eclampsia with the appearance of albumen in the urine, and *vice versa.*

I put this lady on milk diet because I have often witnessed its beneficial action in Bright's disease. The result was all that could be desired.

I have already said a great deal more about eclampsia than I intended to do when I began this report. If the case will throw any light upon the subject I will be more than satisfied. Although I have allowed myself to theorize upon the pathology of eclampsia, I am unable to give any reason why the milk diet acted so beneficially in this case, as it generally does in all cases of albuminuria.

ART. III.—*Dislocation of the Long Head of the Biceps Flexor Cubito Muscle. Its Diagnosis and Treatment.* By JAMES S. GREEN, M. D., Elizabeth, New Jersey. (Read before the Union County (N. J.) Medical Society, April 3, 1877.)

On the 14th of January last, I was called to see a lady, aged 52 years, of large frame and very fleshy, who was suffering severe pain in her right shoulder, which had within the last three months been the seat of two injuries occasioned by violence. The history of her injuries was as follows: Early last November, she fell upon a slippery front door step and was precipitated to the sidewalk, when she felt she had injured her shoulder. She rode immediately home, where getting from her carriage, she was improperly supported by her attendants, and fell again, when she felt the bone, as she termed it, return to its place, and her acute symptoms were relieved. She suffered a week or more

from the usual soreness, and then considered herself well again.

About ten weeks after the first accident, while attempting to drive a bird into its cage, striking at it over head with a newspaper, she was seized with violent pain in the same shoulder and the arm fell to her side. The next day I saw her. She was suffering severe pain in the shoulder joint upon motion, especially when the arm was moved backwards or upwards. The head of the humerus could be felt rotating in the glenoid cavity; there was no fracture of the acromion, coracoid or the scapular end of the clavicle; no flatness of the shoulder; the arm could be brought closely to the body and was most comfortable while there. On the anterior and inner surface of the shoulder, there was a space about a finger's width and a finger's length, which was exquisitively tender on pressure. Any motion putting the tendon of the *pectoralis major* on the stretch, gave intense pain at this place. Movement at the arm backward passively, or by the action of the *latissimus dorsi*, increased violently a pain along the track of the musculo-cutaneous nerve, which pain, however, was constantly present as far down as the external condyle of the humerus. The patient informed me that she was obliged to bind her arm tightly to her body during the night and day, so intense was the pain upon the slightest motion. *Active* flexion of the fore-arm upon the arm to an angle less than a right angle, gave most acute pain at the shoulder.

Having suffered with irregular heart action, probably due to a fatty heart, she was unwilling to take an anæsthetic, and very averse to having an effort at manipulation made to relieve her trouble. Nothing was done but the application of a sling and bandage to support and keep the arm quiet, and the use of anodyne lotions to the shoulder.

Ten days after the last accident, being relieved from her sling and bandage, she went out on the piazza of her house to fasten a window shutter. The platform being slippery, she felt herself falling, and tried to catch hold of the shutter with her left hand, but missed it. She then threw her injured arm upward and backward in her effort to save herself from falling, and, being seized with the most agonizing pain, felt something return to its place with a snap.

Two days after this occurrence I saw her. The pain at the shoulder had remarkably diminished since my last visit, and the power to use the latissimus dorsi and deltoid muscles without severe pain had returned. The patient dated her improvement from the time she fell on the piazza. She steadily improved

from this time under the use of passive motion and frictions, and has now entirely recovered the use of her limb.

The question arose in my mind what was the lesion. It was no common accident, and one upon which very little has been written.

Dislocation of the humerus was differentiated by the presence of the head of the bone in the glenoid cavity, and by the fact that the arm could readily be brought to the side, and was more comfortable in that position.

Fracture of the neck of the humerus was also impossible, because the head of the bone rotated with the shaft.

Diastasis of any of the epiphyseal extremities of the bones about the shoulder joint was precluded by the patient's age.

There was no fracture of the acromion or coracoid processes of the scapula or the acromial end of the clavicle.

What injury, then, could account for the violent pain and inability to move the part? *Dislocation of the long head of the biceps muscle* from its bed in the bicipital groove of the humerus alone answers the question satisfactory.

When we review the surgical anatomy of the part and interpret the symptoms by its light, the explanation becomes interesting and convincing. The long head of the biceps, arising from the upper edge of the glenoid cavity, passes across the head of the humerus in a special sheath taken from the synovial lining of the joint, and crossing between the tuberosities of the humerus, enters the bicipital groove, in which it is held by a fibrous bridge. At the *anterior* lip of the groove, the tendon of the pectoralis major is inserted, and into the *posterior* lip the latissimus dorsi and teres major have their insertion. Between the bone and the biceps, the musculo-cutaneous nerve passes after it has perforated the coraco-brachialis muscle.

Now, the long head of the biceps, after its dislocation from the groove, lies on and beyond the anterior edge of the groove, under the tendon, and at the insertion of the pectoralis major muscle. Consequently, the arm being brought closely to the body, there is the least pain, because the tendon of the pectoralis major muscle is thereby relaxed and the injured groove and musculo-cutaneous nerve is not pressed upon. The use of the deltoid muscle produces pain because it puts the pectoralis major

secondarily on the stretch. The action of the latissimus dorsi and teres major also gives pain, because they are antagonistic to the pectoralis major. Flexion of the forearm upon the arm gives great discomfort, for the obvious reason that the motion is produced by the injured muscle. Pain along the distribution of the musculo-cutaneous nerve down to the external condyle, is due to the unnatural pressure of the nerve upon the bone by the displaced tendon.

Now, having diagnosed our case conclusively, what are the indications for treatment? Having placed the patient under an anæsthetic, bend the forearm upon the arm at an angle *greater* than a right angle, rotate the hand outward and at the same time carry the arm upwards and backwards. The rotation of the hand will turn the shaft of the bone and bring the bicipital groove toward the displaced tendon, while the upward and backward motions of the arm tend toward the same result. This plan of treatment is drawn from the accidental mode on which my patient reduced her own dislocation, and is one which, as far as I am aware, has never been before advised.

The surgical literature upon this subject is extremely meagre, and no directions are given in the books for the relief of this distressing condition, except, perhaps, by Dr. Gross in his work on Surgery. The advice there given is to relax the tendon and press it in place with the fingers, a procedure which will not be followed with the success desired.

Dr. Frank Hamilton, in his work on *Fractures and Dislocations*, page 578, under the head of "partial dislocations" of the humerus, gives a case reported by Alfred Mercer, of Syracuse, New York, in the *Buffalo Medical Journal*, for April, 1859. Also, in *Perrie's Surgery*, edited by John Neill, M. D., page 255, we find an account of a case in which an autopsy was held, and the tendon was found to be dislocated.

Mercer's case was, in many particulars, identical with the one just reported above.

ART. IV.—*The Etiology of Typhoid Fever.* By W. H. BRAMBLETT, M. D., Newberne, Va.

My attention was, in an especial manner, called to the etiology of typhoid fever six years ago, since which time I have studied

the disease with special reference to its causation in a thinly settled and mountainous country, supplied with pure spring water. The territory over which I practise extends along both sides of New River, Virginia. The north side of the river is an elevated table-land 2,400 feet above the level of the sea, with no ponds, except here and there a "sink-hole" that contains almost entirely water.

The south side of the river is well watered with numerous freestone springs, and the country is broken by mountains and hills into numerous valleys and gorges. There are neither ponds nor marshes, even of small size; the elevation is from 2,200 to 2,500 feet above the sea; and it is here that nine-tenths of the cases of typhoid fever I have to treat occur.

The modern English and German theory of the causation of this disease may, in part, be correct, in that it is through the contamination of drinking water, in densely populated communities, that the disease is propagated; yet it is by no means proven that this is the case in the sparsely settled country, but the reverse seems nearer the truth. I must insist, as I have done elsewhere with regard to scarlatina,* that the thinly settled country presents advantages for the study of this question that do not obtain where there are dense masses of human beings. If the country practitioner had the time, and would study questions of this kind as assiduously as the professor in charge of a large hospital, and in possession of an immense city practice, he could materially aid in elucidating, not only the etiology of this disease, but that of scarlet fever and puerperal fever, diphtheria, and perhaps erysipelas.

The recent teachings in regard to the etiology of typhoid fever, have generally been accepted by the profession, because nearly all the writings emanate from those who practise in large cities but who have not seen the disease as it is often found in the country. These writers ignore the theory of contagion, because, in the multitude of personal contact in city life, they cannot trace the origin of the disease, in a given case, to any particular exposure; hence they conclude that all typhoid fever patients have drunk water from the same general contaminated

Trans. Med. Soc. of Va., 1874, pp. 49 *et seq.*

source and that that alone must be looked to as the medium of propagation. Before this question can be definitely settled, the experience of those who practise in thinly settled communities must be compared with that of those who practise in more densely populated districts. The one will supply the deficiencies of the other, and out of the whole the truth will be evolved.

Typhoid fever is now classed as a miasmatic, contagious disease, propagated by a peculiar poison or virus, which, before it can be effective, must, first and *always*, have passed from the body of one diseased; it must have been developed to a state of maturity or ripeness by residence in the presence of decomposing organic matter, as fæces, before it is capable of producing the disease in the healthy body. It cannot be conveyed directly from the sick to the well, but is *always* indirectly communicated; and further, it never originates spontaneously. Such is the modern view.

The following cases have been studied with all the care that a limited amount of time would permit, with special reference to the light they might throw upon this subject:

Case I. Samuel J., æt. 7 years, was taken twelve days before I was called, with "chilly sensations," cephalalgia, and pain in the back and legs. I found him (January 3d, 1872,) with tongue red and dry, bowels tympanitic and some disposition to diarrhœa, anorexia, slight bronchitis; lenticular rose spots, said to be pathognomonic of typhoid, were found on his body. Under appropriate treatment, convalescence was established on the 26th day.

Case II. Jane J., æt. 12 years; an inmate of the same house and sister to case I. The initiatory symptoms were similar to those in the case of her brother. The morning temperature during the first week ran up from 100° to 103°F., and the evening from 101½° to 104°F. Pulse went up from 100 to 110 per minute. She was taken down January 20th, 1872, seventeen days after her brother. During the second week diarrhœa was developed, the rose-rash appeared, anorexia complete; pulse 110 to 120; temperature ranged from 103½°, morning, to 105°F., evening. During the third week the morning temperature had declined considerably, but at the termination of the week a catarrhal pneumonia was developed; the pulse rose to 130, and the temperature ranged from 103° to 105° F., morning and evening; cough troublesome. Under stimulants, tonics and an

abundance of fresh milk, she recovered and was convalescent on the forty-eighth day of the disease.

The family from which these two cases are reported, consisted of these two children and a widowed mother. A creek ran in fifty steps of the house door, to which the steep hills came down well on both sides, making no bottom. The family used water from a spring that ran out from under a steep hill, fifty yards from the house, up the ravine. The hill, from under which it ran, was not in cultivation, but mostly covered by primitive woods; nor did any family live on it at any point from which the water could have been poisoned. Not a member of this family had, for six months, been three miles from home. There was not then, nor had there been for years a case of typhoid fever as near them as three miles. The family was poor and no one from a distance ever stopped at the house, and it did not strike me as possible that the disease could have been conveyed to them by any one passing.

A relation, a young man 22 years of age (CASE III) came to the house to assist the mother in nursing her children, took the disease January 13th, 1872, fifteen days after he came to the house. The disease was well marked and ran a mild course, and the patient was convalescent on the 26th day.

He must have contracted the disease at this house, as it did not, nor had not, prevailed in the neighborhood from which he came; and these were the only cases that occurred in that part of the county that year.

CASE IV. John L., æt. 13 years; had been sick one week before I was called. The attack came on with "chilly sensations," cephalalgia and pains in the back and legs. I first saw him May 2nd, 1873. His bowels were moved by castor oil, after which he had diarrhœa; tongue dry, and in a few days became red and pointed; tympanites; no appetite; had had several attacks of epistaxis; rose-rash appeared and was well marked. Pulse when first seen, 96 to the minute, which rose during the second week to 102. Temperature during the week ranged—morning, 103½° to 104°F., evening, 105° to 105½°F. He was dull and listless through the day and delirious at night, and complained of his head; countenance dusky. During the third week the delirium continued with subsultus; perspired freely at times. Pulse rose to 115; the temperature ranged during the week from about 103½°, morning, to 105°F., evening. During the fourth week the morning temperature declined,

and he went on regularly to convalescence, July 4th, the fortieth day.

Case V. Cindarilla L., æt. 15 years; was attacked June 20th, 1873, forty-seven days from the commencement of the illness of Case IV, her brother. During the first week there was some pain in the head and legs. Diarrhœa was slight during the second week, the tongue dry and a little red with slight tympanites; no eruption or epistaxis. The evening temperature did not exceed 104°F., at any time. The disease puresued a mild course to convalesence on the thirty-second day.

Case VI. Alex. L., brother to cases IV and V, æt. 20 years, developed the disease June 28th, 1873, on which day I saw him. This was preceeded by slight premonitory symptoms for two or three days. Found him suffering with his back and legs, with slight head-ache, which latter became severe during the latter of the first week; he had several attacks of epistaxis. Pulse during the week from 90 to 100. Temperature: morning, from 100° at first of the week to 104°F. at latter part; countenance dusky; patient dull and listless; perspires freely at times. Second week, tongue more dry and red; diarrhœa profuse; considerable tympanitic distension of abdomen; anorexia complete; characteristic eruption appeared; almost constant delirium with subsultus tendinum; copious sweating at times. Pulse 106. Temperature: morning, from 104° to 104½°F.; evening, from 105° to 106° F. During the third week the morning temperature was lowered 1½° and the evening half a degree; the pulse ranged from 106 to 110. During the fourth week the fever gradually subsided and convalescence was established on the fifty-second day.

Case VII. Ella L., æt. 21 years, was attacked July 4th, 1873, by the usual symptoms of a mild case of typhoid fever, which terminated in convalescence at the commencement of the fourth week.

Case VIII. Letisia L., æt. 14 years; took her bed with the usual symptoms of typhoid fever, July 14th, 1873. It developed into a severe attack with dry, red tongue, diarrhœa, eruption, with gradual rise of temperature, characterized by morning remissions and evening exacerbations, and terminated in convalescence on the thirty-second day.

The last five cases were all inmates of the same house and members of the same family, which consisted, in addition to those above named, of the father, mother, and eldest sister, all three of whom had had the disease fifteen years before, and before they removed to their present residence. The house in

which this family resided was situated on the bank of New River, thirty steps from the water's edge. So far as could be ascertained, no case of typhoid was ever in the house before. Case IV, the first to take the disease, had not been five miles from home for six months, nor had any one been to the house who had the disease or who had been where it was; and at the time this case was developed there was not a case in the county, nor had there been one in three miles of the house for five years. The spring from which this family got their water was situated 150 yards up the river, above high water, and ran out from under a steep hill, a part of which was in cultivation. Two other families, one of three and the other of eight members—the children of the latter embracing all ages from infancy to 16 years—used water from the same spring, but none of them took the disease. No member of either one of these two families would visit the house where the "fever" was. No pig-sty was near the house. The privy for the family was lower down the river, forty yards from the dwelling and in the opposite direction from the spring. This family frequently washed their vegetables in the river before cooking, and if there was any contagion it must have been from this source, though no case of fever, to my knowledge, existed on the river or its tributaries, for the distance of fifteen miles above; and indeed the season of the year at which case IV must, if at all, have received the contagion, precludes the probability of its being derived from that source, as a severe and protracted winter had but so recently broken up. It would not, I think, be reasonable to suppose that living germs of typhoid fever would be found floating in the river so early in the spring, as frost is believed to destroy the germs of most diseases.

Case IX. Stephen T., æt. 19 years, who went to the house when the last five reported cases were sick, to help to tend the crop, sleeping in the house and eating at the table, developed typhoid fever, July 6th, 1873, about two weeks after he had been at work at the house. The symptoms were characteristic of typhoid fever, as evinced by the eruption; the dry red tongue; the tympanites and diarrhœa; the regular daily increase of temperature, with morning remissions and evening exacerbations, &c. He was convalescent on the thirty-second day.

Case X. Mary T., a delicate girl, æt. 8 years, and sister to

the last case, was taken down with the usual symptoms of typhoid. I did not, however, see her till August 14th, when I was called to arrest an epistaxis. I was told she had lost a quart or more of blood. I found her almost pulseless at the wrist, but the bleeding had ceased, from clotting of the blood in the nasal passages, before I reached her. Her tongue was dry and brown, and abdomen greatly distended with gas. Her skin was covered with petechiæ, presenting all the appearances of a true purpura-hæmorrhagica; pulse 130 to the minute; temperature at the time of my visit, 97½°F., which depression resulted from the hæmorrhage she had sustained; the temperature, however, rose in a few days to 104° in the evening. Astringents, tonics and stimulants were given, with an abundance of fresh milk, under which she rallied, but in a few days had a small hæmorrhage from her bowels and a slight one from the gums. The treatment was continued, and in a few days she had rallied again; temperature rose to 104°F. in the evening, and the pulse went down to 120. August 23d. A catarrhal pneumonia was developed. The temperature, which had gone down considerably, again rose to 103½°F.; respiration, 30 to the minute; pulse remained at 120. In a few days the fever commenced subsiding gradually, the tongue cleaned off, the tympanites subsided and she was convalescent September 18th, the forty-sixth day.

The father of the last two cases, aged 39 years, developed about the middle of August, what I believed to be a mild case of typhoid, but recovered without having gone to bed more than two or three days.

These two last cases were members of a family of nine persons, consisting of father, mother and seven children; neither the mother nor any of the rest of the children took the disease. The family used water from a spring that ran out from a steep hill opposite to the house, across a ravine. No source of contagion could be discovered about the premises. The family lived off in the hills, one mile from New River, and one and a half miles from the house where cases numbered from IV to VIII, inclusive, were sick. There can be but one opinion as to the source of the contagion in this family. Case IX contracted it at the house where cases numbered from IV to VIII, inclusive, were sick with typhoid, and communicated it to his sister and father.

Case XI. Sallie M., æt. 14 years, went to the house on an errand where case IX was sick, and was taken down in bed, July 22d, 1873, about fifteen days from the time of her exposure. She had pain in her head, back and limbs, epistaxis, diarrhœa

and tympanites, with dry, red tongue during the second week of the disease, with gradual rise of temperature from day to day till the acme was reached, with evening exacerbations and morning remissions, and the gradual decline of all the symptoms during the third week to convalescence, which was reached August 21st, the twenty-eighth day of the disease.

CASE XII. Russell M., æt. 17 years, and brother to the last case, was taken down August 26th, 1873, with the usual symptoms of typhoid. The disease ran a mild course, similar to the preceding one and he was convalescent on the thirty-second day.

If case XI contracted the disease on her visit to the house where case IX was sick, the period of incubation could have been only fifteen days. This family consisted of these two children and a widowed mother. The mother did not take the disease. They lived in an utterly isolated place in the hills one and a half miles from the river. The spring from which they procured their water ran out at the foot of the hill on which they lived. The materies morbi was unquestionably received into the person of case XI at the house where case IX was sick, and she communicated it to her brother.

CASE XIII. Joseph S., æt. 14 years, was taken down in bed July 8th, 1873, with well marked symptoms of typhoid. It ran a mild course and the patient was convalescent on the thirty-sixth day.

This case was a member of a family of eight persons, all children except the father and mother. No other member of the family took the disease. They occupied a house 300 yards from that in which cases IV to VIII, inclusive, were sick with "the fever," but used water from another spring. None of the family visited the latter house, but frequently had to pass in front of the door. No source whatever of infection could be found about the premises. So this patient must have contracted the disease by merely passing in the vicinity of those sick of the disease, or it must have originated spontaneously, as there was no opportunity to contract it elsewhere.

CASE XIV. Mary B., æt. 28 years; unmarried; was taken down with typhoid, August 28th, 1875. She was attended during the first week of her illness by another physician; hence I did not see her until the second week. As stated to me by her sister, she for several days felt indisposed; had chilly sensations, pains in her head, back and legs, with dullness of intellect,

and in a few days diarrhœa. I found her with head-ache, and very restless at night. Upon examination, the characteristic eruption was well marked; her tongue red and coated brown and dry; some diarrhœa continued with tympanites; anorexia complete. Pulse 110 to the minute. Temperature: morning, 101½°, evening, 103°F., which continued about the same throughout the second week. During the third week, the temperature declined gradually—in the morning more rapidly than the evening; the other symptoms subsided, and she was convalescent on the twenty-ninth day.

She lived in her brother's house, whose family consisted of himself, wife and four small children, none of whom took "the fever." They lived in a village (Radford Furnace) in this (Pulaski) county of 60 or 70 inhabitants. The whole village was supplied with water from a single large spring that ran out at the base of a mountain. She had not been a mile out of the village for months, nor had any one so far as known, who had the disease, been to the village; nor did it at that time exist anywhere else in the county. The village was newly built, and no case of typhoid had occurred in it since it was founded. The family was exceedingly cleanly, and the privy was thirty steps in the rear of the dwelling, which no one used except the family. None of the privies at the place were so situated as to poison the spring. This was the first and only case that occurred in the village.

Case XV. Voice B., æt. 20 years; very robust; was, after some premonitory symptoms, taken down to bed October 2d, 1875, with cephalalgia, pain in back and legs with bronchitis; tongue dry and contracted; anorexia complete. In a few days diarrhœa came on, following a dose of castor oil. During the first week the pulse ranged from 88 to 92 to the minute. Temperature in the morning went up from 101° to 103°F.; evening, from 102½° to 105°F. Early in the second week, his pulse reached 104°, his temperature, morning, 104½°F.; evening, 106°F., notwithstanding his treatment was anti pyretic. His cough was troublesome, but he expectorated no blood. The characteristic eruption appeared on the skin; abdomen distended; diarrhœa had to be controlled by opiates; delirium at night; tongue dry, red, and the mouth filled with sordes. This condition, with increase of nervous phenomena, and increased frequency of pulse, continued through the third and into the fourth week, when he died from apnœa, October 24th—on the twenty-fourth day of his disease.

This patient was an inmate of his father's family, which consisted of father, mother and four children, neither of whom took the disease. So far as could be ascertained, he had not been exposed to the disease, nor had any one been to the house who had the disease, or had been where it was. The family used water from a spring forty feet from the house near the river bank, and which was liable to overflow from high water. No source of contagion about the premises could be detected.

Case XVI. Marion H., æt. 30 years, was, after some premonitory symptoms, taken down to bed June 4th, 1876. When I saw him he had slight rigors, cephalalgia and pain in his back and extremities; tongue dry and coated white; some tympanitic distension and anorexia; some bronchitis. Pulse 84 to the minute; temperature: morning, 100°; evening, 102°F. During the week, the pulse and temperature went up gradually. Pulse, during the second week ranged from 88 to 96. Temperature: morning, ranged from 102° to 103°F.; evening, from 104° to 104½°F. Slight epistaxis occurred; rose-rash marked on body; tongue red, contracted and coated brown; diarrhœa and tympanites more marked; is quite deaf, with some delirium at night; subsultus tendinum marked. During the third week petechiæ appeared, first on his arms and legs, and then all over his body; his gums commenced bleeding profusely, requiring the application of astringents to control it; his nose then bled freely and had to be tamponed; then his kidneys and urinary passages, and finally his bowels poured forth blood in almost continous streams until he was reduced to the lowest condition compatible with life. Every inch of his tegumentary surface might have been said to be the source of a hæmorrhage, for he was covered over with spots, as large as a split pea, of exuded blood. During this time his temperature was variable—frequently below the normal—and his pulse went up to 130 to the minute. He took immense quantities of whiskey and drank milk freely, and finally made a good recovery. He was convalescent on the sixty-fourth day.

This patient's family consisted of himself and wife, and lived on a bluff a mile from the river, and was situated in an out-of-the-way place. No one outside of the neighborhood ever visited the house, and he never went out of the neighborhood. There was no "fever" in the neighborhood, nor any in the county where he was taken sick. There had been no case of typhoid near where he lived for years. The family used water from a large

spring that ran out at the base of the hill on the opposite side of a ravine. Three other families used water from the same spring, none of whom took the disease, nor did his wife take it. No source of contagion whatever could be detected about the premises.

Case XVII. Mrs. H., æt. 32 years; mother of three children; was taken August 15th, 1876, with a dull headache and pain in extremities; tongue somewhat dry and coated white; bowels easily moved by small doses of purgatives; no appetite; slight tympanitic distension of the abdomen. Pulse 90 to the minute. Temperature: morning, 99½°, evening, 101°F. By the end of the first week the pulse had reached 98, and the morning temperature, 102°; evening, 103°F., with increased dryness and redness of the tongue, and increased tympanitic distension, and bronchial irritation. During the second week the pulse went up to 110, and the temperature ranged from 102½°, morning, to 103½°F., evening, with increased redness of the tongue, and greater abdominal distension. The temperature during the third week receded gradually, with increasing morning remissions, until the twenty-eighth day, when convalescence was evident.

The family consisted of herself, husband and three children, none of whom took the "fever." They lived in the town of Newbern, a village of 350 inhabitants, and used the same water that is used by the whole town. A large spring, situated half a mile off, supplies a covered-in reservoir on the hill, from which the water is conducted by street mains to the public and private hydrants on the sides of the street. There is no possible way by which the water could become contaminated by sewerage. No one in the town had the disease at that time, nor had there been a single case in the village or its vicinity for ten years. She had not been out of the town for months, and, so far as could be ascertained, no one having the disease had visited the village in the last twelve months. No one took the disease from her—her husband having had it, and her children being too young to be very liable to take it.

The diagnostic symptoms, in the above reported cases, have not been dwelt upon as fully as I would have liked to do, because it would have extended this paper beyond the limits assigned it, but I trust the notes are sufficiently full and extended to convince all that no error in diagnosis was made.

If the modern German and English theory of the etiology of

typhoid fever be correct, where did the contagium in I, IV, XIV XV, XVI and XVII, come from? These cases cannot be traced to drinking water contaminated with sewerage; they cannot be traced to filth about the premises, as cesspools, pig styes, etc.; they cannot be traced to any case of typhoid in the neighborhood as a source of infection, either directly or indirectly, for they originated under circumstances that excluded the probability of the importation of the disease from some other locality; none of them had been away from home to where they could, according to this theory, have received the poison into their bodies, and no one with "the fever" had visited their houses. The origin of these cases, under this theory, or of the materies morbi in their production, cannot be accounted for unless it be conceded that dumb animals can have typhoid fever (which is not proven), and distribute its peculiar virus over the country.

The means of disposing of fæcal matter is, in the county, almost always defective; the place for its final disposal does not generally exceed forty or fifty steps from the dwelling. I have frequently been reminded, when at the house, perhaps in the room of those sick of typhoid, by the unsavory odors from the privy, that perhaps from this source came the contagium of the disease from which they were then suffering; that the materies morbi resulted from ordinary fæcal decomposition, into which no typhoid virus had been deposited.

But under this supposition it would also be difficult to account for the origin of cases II, III, V, VI, VII, VIII, IX, X, XI and XII. It was not possible for the water that these parties drank and cooked with, to become contaminated with the materies morbi of the disease.

From whence, then, did the contagium come? Obviously, I think, from the bodies of those having the disease; and that the spread of the disease through the remainder of the family, as well as to those who visited the house, should be attributed to direct contagion.

The facts set forth in the history of these cases, connected with my experience with the disease for the last twenty years, as it exists in a thinly populated country, suggests the following conclusions:

1st. That typhoid fever often originates spontaneously, or that

the contagium, to which the disease owes its specific character, may originate *de novo*.

2d. That typhoid fever is essentially a contagious disease, and that a case that has originated autocthonously, is capable of infecting, directly by contagion, the well who go into the presence of those having the disease.

3d. That one attack gives immunity from subsequent attacks, and that this rule is as invariable in typhoid as in measles or small-pox.

ART. V.—*Orchitis Dependent on Mumps.* By R. C. M. PAGE, M. D., New York, N. Y.

CASE I. H. B. P., æt. 23, single and clerk by occupation, was first seen by me during the latter part of December last. He stated that he was engaged to be married shortly, and with considerable anxiety, complained of aching pains in both testicles, in the back and along the spermatic cords. Supposing him to be suffering in consequence of ungratified sexual desire, I advised him to keep away from his intended bride as much as practicable until married. Two of the clerks having just recovered from the mumps, however, he was directed to remain in doors for the present. Two days afterwards he complained of stiffness of the jaws, with pain on opening the mouth, and the right parotid gland was slightly swollen. Next day there was some fever and headache, but thinking it would be an ordinary case of mumps, I did not see the patient again for two days, when I was sent for, and found the right testicle somewhat swollen and painful.

Jan. 1, 1877. Left testicle also swollen to-day, and thinking it might be a case of metastatic orchitis due to mumps, I called in Professor H. B. Sands, who confirmed the diagnosis. Ordered ice-bag to the testicles, and to take three compound cathartic pills.

Jan. 6. Patient is about the house, and on the 12th, Dr. Sands considered him to be well and in a marriageable condition. I have recently seen the patient, and he assures me that he has been perfectly successful in performing his marital duties, and I find no evidence of atrophy of either testicle at this date.

CASE II. W. M. P., æt. 30, single and broker by occupation; is a brother of the above, and boards at the same house. First began to complain on January 18th of pains in back and hips, and he supposed he had strained himself in some way. Three days afterwards, I found the left testicle somewhat swollen, but

there had not been, nor was there now any swelling of either parotid. Patient remained about the same until the 22d, when the testicle was found to be considerably swollen, hot and tense. Dr. Sands being requested to see the case, considered it to be similar in character to Case I. Same treatment was pursued, and patient fully recovered in about one week.

Case III. O. S., æt. 27, single, commission merchant, was doing business at the same house with Case I. I was called to see him about January 1st, and found that he had ordinary mumps in both parotids, and uncomplicated with orchitis. He fully recovered in about ten days.

Three other cases came under the notice of Dr. Arango, of this city, about the same time. One of them was a clerk in the house already referred to, and the other two were doing business in the same locality. Of these three cases, *all* were affected with metastatic orchitis—two in the left testicle, and one in the right. Add to these the two clerks who were mentioned in Case I, and we have altogether eight cases of mumps. Of these, four had metastatic orchitis; one had orchitis in the left testicle without any swelling of the parotid glands, and three had ordinary mumps.

All of these cases have been recently seen, and none of them, as yet, have atrophy of the testicles. Should atrophy occur subsequently, would it not be due (since there did not seem to be sufficient swelling to cause injurious compression) to disease of the epithelial lining of the seminiferous tubules resulting in their degeneration and in ultimate shrinking of the entire gland?

No. 31 W. 33d street.

Art. VI.—*Phlyctenular Ophthalmia.* By W. J. McDowell, M. D., Assistant Surgeon to Baltimore Eye and Ear Infirmary. (Read before the Baltimore Medical and Surgical Society March 15, 1877.)

The disease selected for discussion this evening is very common, especially in our large cities. It is most frequently met with in the lanes and alleys of the most populous districts where its subjects are constantly surrounded by the mal-hygienic influence common to such quarters. Indeed, so common is it amongst the lower class of society that it forms a large proportion of all the dispensary work of the ophthalmic surgeon. But,

fortunately for the doctor, it is not confined to this class. In our daily rounds we are constantly brought in contact with it in persons in easier circumstances, who are consequently under more favorable surroundings.

Our ophthalmic text-books, instead of having a single, well-written article on phlyctenular ophthalmia, in which the different types and varieties are described, have lengthy descriptions of phlyctenular conjunctivitis, phlyctenular corneitis, pustular conjunctivitis, scrofulous keratitis, nascular corneal ulcer, etc.,—a formidable array of formidable names which the general practitioner may well be excused from even so much as memorizing. Although technically correct, I regard these many subdivisions and the multiplication of our nomenclature unfortunate, because the pathology, the clinical history, the prognosis and the treatment of all the above forms are very much the same—the difference being chiefly in the location of the vesicles. For this reason I will include them all under the general head of phlyctenular ophthalmia.

Phlyctenular ophthalmia, as the name signifies, is a disease of the eye characterized by the formation of small bladders or vesicles. It belongs more particularly to the period of childhood, being most common between the ages of two and ten years, after which time the liability to it lessens. It is comparatively rare in any form after early adult life.

It is generally ushered in by a sense of burning and itching of the lids or by a sensation as if a grain of sand had got in the eye, followed by photophobia, lachrymation and ciliary neuralgia. If the cornea be the principal seat of the disease, all of these symptoms will be exaggerated, so that the suffering of the little patient will be intense.

If the eye be examined early in the course of the disease, the ocular conjunctiva will be found to be deeply injected in the vicinity of the spot on which the vesicle or vesicles are to appear. This patch of injection is generally pyramidal in form, with the apex turned toward the cornea. Immediately under this will be seen a zone of pinkish episclerotic injection. In a few hours, a vesicle about the size of a small millet seed will form at the apex of the congested triangle, generally at the sclero-corneal margin (phlyctenular conjunctivitis proper), although at times

it may be situated a line or more distant, either on the cornea or conjunctiva. The contents of the vesicle differ in character according to the situation of the vesicle. Thus when it accurs on the cornea it is filled with a perfectly white and clear liquid, and is generally connected with the conjunctiva by a leech of bloodvessels. This condition is described by some writers as "vascular corneal ulcer." When situated on the sclero-corneal margin, the contents will have a yellowish tinge; and when it occupies a site on the conjunctiva somewhat removed from the cornea, we have, in most cases, a pustule instead of a vesicle; this variety is discribed in book as *pustular conjunctivitis*. Again, instead of a single vesicle, there may be many, the whole cornea being not unfrequently surrounded by them. In such cases the ocular conjunctiva is evenly congested, the zone of pinkish circum-corneal injection complete, and the eye presents an appearance which might be mistaken by a superficial observer for incipient iritis.

In a certain number of cases the vesicles will shrink, and the contents be absorbed; but in the vast majority of cases, the delicate epithelial envelope will soon burst, the fluid escape, leaving a raw and excoriated surface, which, however, under proper treatment, will soon heal.

Occasionally two or more vesicles may coalesce and a small ulcer be produced. These ulcers are generally very amenable to treatment, but occasionally they extend both in depth and circumference, and if situated on the cornea, may even perforate that membrane. This is most likely to occur if stimulating or astringent collyria, such as the salts of silver, copper, zinc or lead, have been injudiciously used by the attendant. After the rupture of the vesicle, the irritation gradually subsides and the denuded surface is soon repaired by a new epithelial covering.

The condition of the eye may now continue to improve until the patient entirely recovers. But in many cases, indeed, I may say in the majority of cases, symptoms of fresh irritation will manifest themselves; a new crop of vesicles will appear, most probably on a portion of the ocular surface previously unaffected, and this condition in its turn may be followed by another attack, until the disease assume a chronic character—fresh crops of vesicles following hard on the heels of their pre-

decessors. I have seen children in whom this state of affairs has persisted for two or three years—the intermission between the attacks being very short and incomplete. For this reason the disease should not be regarded a trivial thing and slighted accordingly; but it should be actively combatted in its incipiency, and its tendency to chronicity be born constantly in mind; for, aside from the irritation to the general nervous system, which would be produced by the constant sensation as of a cinder or some other foreign substance in the eye, lasting for months, and sometimes for years, it will be readily understood how the constant photophobia in the more chronic cases will certainly undermine the general health by excluding the child from the hygienic influences of light, fresh air and exercise.

The general appearance of a child laboring under this disease is almost pathognomonic—so much so that the diagnosis, phlyctenular ophthalmia, may be made with a near approach to certainty, without so much as a glance at the eye ball itself; provided the case be seen during the height of the disease. The child goes about with the hands pressed hard against the closed lids; the lids themselves in a state of tonic spasm, and very puffy from collections of tears; the integument both of the lids and upper lip is generally very much excoriated from the overabundant flow of tears and from frequent wiping of the eyes and nose; the patient, also, seeks the darkest corner of the room, or will bury his face in the corner of a sofa or in the bedclothes, in order to exclude from his eyes the rays of light. Such is a picture of phlyctenular ophthalmia—a picture which, no doubt, we have all looked upon too often.

The *causes* of the disease are many. Perhaps the most fertile source is struma. Again, children of a highly nervous temperament are especially liable to it. It also occurs in the course of some of the exanthemata, especially rubeola. But many cases present themselves in which no possible cause can be assigned. These latter cases may, for convenience, be termed idiopathic until we obtain sufficient light to enable us to make a more exact classification.

The *prognosis* of phlyctenular ophthalmia, so far as ultimate recovery is concerned, is generally good. In mild cases, especially if seen early in the attack, and the cornea be not involved,

complete recovery will probably occur in from ten days to two weeks. But, in the majority of cases, the disease is not so easily cured; and just at the time that we are ready to congratulate ourselves upon the cure, a fresh attack will occur. But, fortunately, by a judicious course of constitutional treatment, we can prevent this tendency to relapse, and thus cure the patient. If the phlyctenulæ have occurred on the corneal surface, and especially over the pupillary area, the prognosis is graver, for a more or less permanent cicatrix will be left, according to the depth to which the ulcerative process has extended.

In some cases phlyctenular ophthalmia will develop another disease of the eye—especially in children of a strumous diathesis. I refer to the disease known as marginal blepharitis, or inflammation of the edges of the lids. I do not recollect seeing this result of phlyctenular ophthalmia mentioned in any of the text-books, but I have observed it in my practice very frequently indeed; so that in my mind there is no doubt that a relation of cause and effect exists between the two, which I explain in this way: The eye being, on account of the irritation, constantly overflowed with tears, has to be continually wiped; the wiping, together with the irritating character of the discharge, is sufficient, especially in scrofulous children, to light up inflammatory action in the lids. When this complication remains after phlyctenular ophthalmia, it will, of course, have to be met with suitable treatment.

The *treatment* is both constitutional and local. When a cachexia exists, little good can be expected from a purely local treatment. Strumous children should be placed under a course of cod liver oil and iron, and this should be continued for some time after the local disease has disappeared, or else there will be a tendency to relapse. As for local treatment the rule should be to reject astringents in every form, and apply only soothing remedies. At the head and front of these stands the sulphate of atropia. This agent should be used in the form of a collyrium, in the proportion of from two to five grains to the ounce of rose water. Sulphate of morphia may be combined with the atropia with some advantage. If the photophobia be urgent a compress of soft linen and cotton wool should be bound on the eye and changed several times a day. This possesses a three-

fold advantage. First, It prevents friction between the globe and eyelids. Second, The linen will absorb the tears as they overflow, and thus prevent, to a great extent, excoriation of the lids. And third, The child is prevented from rubbing the eye, thus doing away with another source of irritation. After the irritation has, in a measure, subsided, the daily insufflation of a little, very finely powdered calomel will be generally sufficient to conduct the case to a successful issue. Blister and other counter-irritants are to be avoided on account of their tendency to produce eczema—the skin being peculiarly susceptible to take on such action during this disease. Any excoriations of the skin of the lids or lips, are best treated by the inunction of some simple ointment.

The corneal cicatrices, left after the disappearance of a phlyctenular ophthalmia, provided the ulcerative process has not extended too deeply into the corneal substance, may be removed by the persistant daily insufflation of calomel, combined with the inunction of Pagenstecher's ointment of yellow oxide of mercury. The general health in all forms of the disease must, of course, be looked to. The child must be properly nourished, and, if necessary, tonics, such as bark, wine and iron, should be administered.

ART. VII.—*Phytolacca Decandra in the Treatment of Mastitis.* By A. A. MOORE, M. D., Camden, S. C.

In this section of country, as a general rule, only negroes are to be obtained as wet nurses. I dislike to employ them in this capacity for fear that they may be reeking with the fumes of some loathsome disease. Having also an innate and unconquerable aversion to all sorts of artificial feeding of infants, when there is any possibility of avoiding it, I hail with delight any remedy which promises relief from that painful trouble—mastitis.

In the January number (1873) of the *American Journal of Medical Sciences*, Dr. G. W. Biggers, of La Grand, Oregon, reports a few cases of threatened mammary abscess which he treated successfully with the fluid extract of poke-root. Recently, I have had occasion to avail myself of the information he has thus afforded. Notwithstanding the process of hardening the

nipples had been resorted to preparatory to nursing, about ten days after confinement the lady's nipples became excoriated and fissured. For this, compound tincture of benzoin, nitrate of silver, &c., were tried in vain. A few days later, a hard lump was discovered beneath the left nipple, accompanied with throbbing and shooting pains through the gland and down the left arm, and with oozing of pus through the nipple. Heeding this premonition of further trouble, and still hesitating to resort to the antigalactigogue properties of belladonna, for reasons already indicated, I immediately began the administration of fluid extract of phytolacca decandra. I gave gtt. xx every three hours in a wineglassful of water, until the lady had taken altogether nine doses, or about three fluid drachms. By this time, all symptoms of inflammation and abscess had entirely disappeared, and the only remaining source of discomfort was the sore nipples. By the aid of a large nipple shield fitted over a glass base, this trouble has also been overcome.

It is proper to mention, however, that before the patient had taken the last two doses, she began to experience some of the neurotic effects of the drug, such as vertigo, dimness of vision, some nausea, etc. These symptoms, I think, admonish us either to entirely suspend its use, or to administer it at longer intervals.

I will also remark, that the phytolacca did not seem to have any deleterious action on the lacteal secretion, as the infant continued to nurse regularly, and without any ill effects whatever.

ART. VIII.— *The Influence of Mental Impressions of the Mother, During the Stage of Utero-gestation, upon the Fœtus.**

In presenting a few observations and reflections upon the important, though apparently but little noticed effect of mental impressions of the mother during the stage of utero-gestation upon the unborn infant, I shall first relate a few instances which have come immediately under my observation.

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* This article is written by a lady of rare cultivation in Tennessee, whose abilities are widely appreciated, but whose name we are requested to withhold. Her article is of interest in connection with cases reported in *Monthly* (February number, 1876, pages 828–839, inclusive). It may be gratifying to the authoress to know that the subject is now attracting a great deal of attention from the medical profession. Dr. Hammond, of New York, has now in press a work on the subject. G. P. Putnam's Sons, New York, publishers.

While there are probably none who will deny the existence of the immediate and lasting effects of this influence, yet there are comparatively few who have deemed it worthy of serious thought or investigation.

Although we are told in the 30th chapter of Genesis that Jacob placed striped rods before the cattle at the water-troughs, that they might bring forth ring-streaked and striped young; the language plainly denies any kinship to the miraculous, in that it says: "And the flocks conceived *before the rods*, and brought forth cattle, ring-streaked, speckled and spotted." Thus we know that even in that anti-christian era, this mysterious influence was known and felt, even extending to the animal kingdom.

The first instance illustrating the influence of mental impressions which I shall relate was that of a lady who, being at about the third month of pregnancy, was requested to assist her husband in lancing his horse's gums for a case of "lampers." Priding herself upon her strength of nerve, and not thinking of the probable effect such an act might have upon her unborn offspring, she took the knife and gave the required gashes, which, of course, caused the blood to flow in a copious stream, while the animal vainly struggled to release its head and clear its mouth of the blood. Although at the time, and afterwards, the lady scarcely gave the occurrence a thought, yet, after the birth of the babe, which seemed externally a perfect child, its asphyxiated condition, together with an uncontrollable navel hæmorrhage, caused its death within a few hours. The mother was most forcibly reminded of her surgical experience with the horse, and this excessive bleeding in her child, and its vain efforts at swallowing and gasping, could not have been but a striking reminder. This, though apparently a trivial circumstance, may seem far-fetched, and not to bear any relation to the supposed cause, but which, if the cause, was of sufficient magnitude to cost a human life.

The second case, while of no vital consequence, will serve to show the immediate relation of even the slightest circumstance, happening to a woman during her period of utero-gestation; and at the time when her entire nervous system is strung to its utmost tension. The lady in this instance being about four months pregnant, and of quite a lively disposition; was passion-

ately fond of strawberries with cream. While passing a garden in early spring-time, she saw some of her favorite fruit growing, and laughingly remarked to her companion that she would place that "mark" where it would not be seen. Suiting the action to the word, she placed her hand upon her back. At the termination of her nine months, a lovely little boy was born, which bore a perfect mark of the fruit mixed with cream as she best loved it, upon the identical spot she had marked out for it on her own person.

The third case directly under my notice, was that of a lady, who, besides possessing a rather high order of mental qualities, was, by delicate health, rendered exceedingly sensitive. While standing at a front window one day during the first few months of her pregnancy, her attention was most unexpectedly attracted by a bloody street-fight which was occurring only a few yards from her door. Being somewhat acquainted with one of the parties, she very naturally allowed her feelings to be engaged sufficiently to see how it should end; and, although remembering the danger she might be incurring, she consoled herself by the reflection that so long as she retained self-control and was not frightened, no evil result could come to her. But the falsity of this conviction as a safeguard, the result will show; for, although she refrained from looking at the blood-streaming faces of the combatants, and not thinking a sight of their blood-stained garments could do harm, she allowed herself to see one of the parties after he came through the fracas, with the entire front of his shirt covered with gore. Whenever afterwards this bloody affair was remembered by her, she would try to avoid all recollections of the mutilated features of the fighters, and strive to think only of the crimson shirt-front; feeling sure that should "mental influence" affect her infant at all, it would only be a stain upon its chest, which could do no harm; and thus the subject, though sometimes rather annoying, would be put aside. But the result proved that the influence of those reflections was not to be so easily controlled; for, at the termination of her period, a fine and apparently perfectly formed son was given her, which bore a most unmistakable evidence of the effect of this bloody affair, not upon the *out side* of its chest, as the mother had supposed, if the worst should come, but in a pair of mal-

formed lungs. Hæmorrhage from the child's mouth occur red, and this, with extreme asphyxia, caused its death in a few hours. This sad result the mother never doubted was caused directly from the continued dwelling of her mind upon the blood-stained shirt-front which had exactly covered the two lungs of the pugilist, and so had cost the life of her infant.

Many similar circumstances, which have come under my observation, could be enumerated as the result of this "controlling mental influence" of the mother upon the fœtus. One is of a lady, who, having placed near her couch the picture of a lovely little boy in such a position that it would be the first object seen in the morning and the last at night, thus allowing her mind to dwell upon it while enjoying the semi-conscious dreamy languor which precedes and follows sleep—thus making the picture her companion both by night and by day during her nine months of gestation. She was delivered at the fulfilment of her time of a boy which grew to bear such a marked resemblance to the picture that many strangers would enquire if it were not his portrait.

Now, since this influence is so generally admitted as a fact, would it not be to the greatest interest of the profession for some of its medical "scientists," as they boast themselves, to dive into the subject with the investigative tools of a finely cultivated intellect and clear understanding, and sap the pith and core of this wonderful comprehensive cause and effect? What might not be discovered by only a small amount of investigating study upon the part of even the limited practitioner in this vast field of usefulness? What could be of greater importance to a nation than to search out the governing principles of this power, simplify and explain them, so that even the most ordinary mind might grasp the governing laws with the light of understanding, and thereby materially aid in the propagation and creation of a perfect race? By this "system" man would most assist woman in her true usefulness; for it has been a noticeable fact that great men always proceed from *gifted mothers*; while on the other hand, talented *fathers* seldom have children to equal them. Only reflect, after the physical laws which control this mental power have been made a generally understood and practised art, or rather science, that woman should be enabled at will, to pro-

duce a family or a people "made to order." Supposing that her tastes should incline to the classical, and she should wish to produce a Homer or a Virgil; or, being attracted by the loveliness of the arts and wish a Raphael or a Reubens; or, descending the scale of time a few centuries, one of England's bards might engage her choice for a Shakespeare, a Milton or a Scott; but, better still, let her patriotism assert itself in choosing a statesman as a model for her offspring, and by exerting her *will*, together with the light the scientist has thrown around her, decides upon a Webster, a Clay, or Calhoun, she would need only to apply the principles to surround herself with the portrait, the biography, and works of the especial object of her choice, and diligently apply herself to the study of his character and mental greatness to accomplish her object. I do not say she would produce a perfect fac simile; but, where there were no disturbing or opposing influences brought to bear upon her, she would, in nine cases out of ten, bring forth a child in which there would most undoubtedly be discovered a very marked resemblance in some, or perhaps many traits of its character—that is, between the natural and the forced production—between the model and the child.

A recent writer, G. H. Napheys, M. D., of Philadelphia, in his work on the *Physiology of Woman*, has given some most excellent hints on the subject of this mental influence, and the causes which he assigns to it will be readily understood by a very limited mental capacity, thereby making the subject comprehensible to those in the most meagre circumstances; for what mother does not wish at least, a lovely baby? And since "a thing of beauty is a joy forever," why should not every mother surround herself with pretty objects and images, and by indulging in pleasing reflections, in a measure, accomplish her object? It is just as evident that these mental and physical qualities of the susceptible mothers are conveyed through the blood to that of the fœtus, as it is sure that the mother's milk, if given to her child during severe mental or physical excitement or fatigue, is a poison to the child. And if loathsome objects and disgusting sights can cause the mind to loose consciousness, the heart to faint, or the stomach to revolt, why should not like disagreeable effects be produced upon other portions of the body by similarly disagreeable impressions?

ART. IX.—*Aphthæ.* By JOHN C. PETERS, M. D., President of the Medical Society of the County of New York; President of the New York Neurological Society, etc., New York City.

Aphthæ, follicular stomatitis, croupous stomatitis, ulcero-membranous stomatitis and thrush are frequently confounded. According to Niemeyer, aphthæ arises from croupous stomatitis; according to Meigs & Pepper, from follicular stomatitis. The ulcero-membranous stomatitis of the latter is the croupous stomatitis of the former; while thrush, according to both authorities, is a fungus-stomatitis.

Aphthæ are small, low, white spots with red borders, which look like flat vesicles, but are in reality solid thickenings, consisting of small patches of plastic or croupous exudation on the free surface of the mucous membrane, under the epithelium. They are not vesicles, for no fluid can be evacuated from them, even in their earliest stages. And when they are thrown off, no ulceration is left, but only superficial excoriations, which fact also distinguishes them from diphtheritic stomatitis.

Aphthæ are more commonly seen on the anterior half of the tongue, on the inner surface of the lips and cheeks and on the hard palate. They are about the size of lentils, and are either discrete or confluent. In the latter case, they may be mistaken for a diphtheritic affection, and some of the so-called triumphs of homœopathy are based upon this mistake.

The diphtheritic stomatitis of Niemeyer is the equivalent of the ulcero-membranous stomatitis of Meigs & Pepper. It is a fibrinous or bacterial exudation in the tissue of the mucous membrane itself, patches of which slough, in consequence of the compression exerted upon its capillaries, leaving unhealthy looking ulcers which clean off slowly, and finally heal from the edges. In severe cases, a large portion of the inner surface of the mouth is often converted into a soft, discolored slough, and the disease is then called stomacace, cancrum oris, etc. Bacteria are always found in large numbers in the exudation.

Thrush, or muguet, is a peculiar form of exudative stomatitis caused by a parasitic plant, or so-called thrush fungus, or oidium albicans, which sometimes grows on the mucous membrane of the mouth. The deposit is found to consist of young and old epithelial cells, fat globules, and peculiar round granules and filaments.

The granules are spores of fungi, while the filaments are the mycelium which branch off in beautiful tree-shaped figures, which, when very numerous, form a thick felt, which may be mistaken for diphtheritic exudation.

Real follicular ulcerations occur from the stoppage, swelling and ulceration of those large mucous glands which are particularly numerous on the inner surface of the lips. They are rarely numerous; frequently there is only one, and in some females they recur at almost every menstrual period, when the disorder is supposed to resemble acne, especially as the greyish, or yellowish-grey secretions at the base of the aphthous ulcers are of a fatty or sebaceous nature.

Treatment: **Cascarilla** is recommended even in the gangrenous thrush of children, by Underwood, as an aromatic bitter and tonic, for the relief of the atonic dyspepsia and debility from which the disorder often arises, and for the diarrhœa which often attends it. By its aromatic properties, it even renders Peruvian bark more agreeable to the stomach and increases its powers.

Calx.—Dewees found great advantage from lime-water and milk, in doses of one-quarter or one-half a teaspoonful four or five times a day in infantile aphthæ when there were green, but not liquid stools. When the diarrhœa is profuse, prepared chalk is preferable, or the chalk mixture may be used.

Calx chlorinata is recommended in scorbutic and other ulcerations of the mouth, as a gargle, made of chloride of lime, grains 120 to 240, water one pint, and honey one ounce. It corrects the fetor, and stimulates the parts to healthy action. It should be filtered before the honey is added. The *liquor sodæ chlorinatæ* is more convenient, and perhaps useful.

Argenti nitras applied in substance to the ulcers is spoken of by Dr. Symonds as an efficient and most decisive remedy in the severe forms of aphthous ulcerations of the mouth; but since chlorate of potash, in four or six or more grain doses has very properly attained the reputation of a specific in aphthæ, the nitrate of silver and muriatic acid are only resorted to when this fails. Niemeyer says the application of nitrate of silver is very painful, but it acts surely and quickly.

Carbolic acid, one part to forty of water is used as a stimulant and antiseptic mouth-wash and gargle in stomatitis, aphthæ,

diphtheria and ulcerative sore throat, especially when from the decomposition of the accumulated epithelium and of the exudation, there is a disagreeable and penetrating fetor from the mouth. It may also be used dissolved in glycerine.

Liquor chlorini, or chlorine gas dissolved in half its volume of water, when largely diluted, is a tonic, stimulant and disinfectant; one part of the gas to eight parts of water is the average strength for a gargle or lotion, and has been used successfully in aphthæ, stomatitis and cancrum oris.

Cupri sulphas is an excellent old-fashioned application in the severer forms of cancrum oris, aphthous ulceration and gangrenous affections of the mouth. Symonds used five grains finely powdered and thoroughly incorporated in half an ounce of honey. It has also often been applied in substance.

Decoctio Cydoniæ, or infusion of quince seeds (120 grains of the seed to one pint of boiling water), is a demulcent often used in aphthous affection and excoriations of the mouth. It is of but little value in itself, but is a good vehicle for other remedies.

Geranium Maculatum.—The virtues of this plant depend upon the quantity of tannic and gallic acid contained in it. In aphthous affections, ulcerations of the mouth and throat and relaxed states of the mucous membranes, it is often used as a wash or gargle, and a decoction in milk is often relied upon against the attendant bowel complaints. But it is better and more convenient to use small doses of tannin, both locally and internally.

Hydrochloric acid, one drachm to one ounce of honey, is regarded as a useful application in aphthous ulcerations and mild cases of cancrum oris. In severe cases, the strong acid has been applied, but chlorate of potash is more reliable.

Magnesia is used as an antacid and absorbent in aphthæ and aphthous ulcerations, especially when acid diarrhœa is present.

Mel, or honey, was employed by Hippocrates to cleanse foul ulcers, and by Dioscorides in fistulous ulcers and wounds, which were slow to heal. The Arabian writers dwell particularly on its advantages in affections of the mouth and fauces, and especially of the gums, particularly when mixed with vinegar. Stillé advises it in all cases in which a mild stimulant is required to change the character of ulcerated surfaces. In all ages it has been applied to the gums and buccal mucous membrane to re-

move aphthæ and slight pseudo-membranous deposits; but it is now usual to associate it with the borate of soda, or chlorate of potash, both of which materially increase its efficacy. The honey of roses and oxymel are said to be superior to honey alone. But in thrush or muguet, Niemeyer says the domestic remedies, such as sprinkling the mouth with sugar, or painting it with borax and mel rosæ are to be avoided, as they render the mouth sticky, and furnish new materials for decomposition, and do not at all prevent the re-development of thrush. Von Maack advises it strongly in the aphthæ of chlorotic females, as, according to him, chlorosis depends upon an imperfect conversion of the products of digestion into sugar in the liver. In Schleswig and Hanover, honey is popularly employed to cure chlorosis, without the aid of iron.

Mercury is used by the homœopathists, and Niemeyer recommends grs. j–ij of corrosive sublimate in Oj of water, as a wash.

Potassæ Chloras is used in aphthous inflammation and ulceration of the tongue arising from anything which irritates the alimentary canal; also in diphtheria, cancrum oris, and gangrenous stomatitis. Hunt gives from 5 to 20 grains for children, and 30 to 60 grains for adults, daily, and uses a lotion of ʒj to ʒij in aq. Oj, as a wash; but these doses are too small in severe cases. It is the principal remedy in follicular stomatitis and aphthæ. Dr. Hanner was successful in 70 cases, with doses of 30 to 60 grains in 24 hours, in expediting the cure. It is particularly useful in ulcerative stomatitis, which commences by small ulcers on the inside of the cheeks or lips, or at the junction of the mucous membrane of the gums with the cheeks, or with the gums themselves, separating them from the teeth. These ulcers may become large and covered with a pultaceous pseudo-membranous deposit, assuming an almost gangrenous appearance and exhaling a fetid smell. Drs. Hunt and Hawkins first found it a prompt and certain remedy in doses of 20 to 60 grains a day. West regarded it as almost specific; Meigs seldom found it necessary to resort to any other means, and authorities innumerable may be cited to the same effect. Wood says it almost always operates like a charm in the follicular and aphthous stomatitis of children. It acts both locally and constitutionally, for it can be detected in ten minutes after its administration in

the urine, in which fluid, it continues to be present for 15 to 48 hours after each dose. Wood also uses a gargle made by pouring a pint of boiling water over ℥j of sumac (or Rhus glabrum) berries and ℥ss of chlorate of potash. These berries contain tannic acid very largely, and also the bi-malate of lime, and he thinks the malic acid gives them a specially beneficial influence upon the mucous membranes. In true gangrenous stomatitis it must be aided by tonics and stimulants. Ringer says it is of signal service in various affections of the mouth, but particularly so in ulceration of the edges of the gums, which is generally limited to one side of the mouth, but then affects both the upper and lower jaws, and also that part of the tongue and cheeks coming in contact with the ulcerated gums. The influence of the chlorate is almost magical. In one or two days it cleans the dirty-looking ulceration, and heals it in a few days more. The chlorate of soda is more soluble than the chlorate of potash, and is at least equally serviceable.

Alum, although more astringent, is not so useful; still it may be relied upon in aphthous ulcers which show little disposition to heal, but rather a tendency to spread.

Quinine proves highly serviceable in aphthous ulcerations when the patient is much debilitated; but the muriate tincture of iron may surpass it. Pulv. rhei and magnes. carb., ā gr. x to xv; spts. ammon. aromat., minim xx, and aq. cinnamonii, ℥ss, is useful in the aphthæ of children, when given in small doses.

Sodæ bicarb. proves effectual when given with a few grains of rhubarb or chalk.

Sodæ biboras, or borax, is a popular and efficient remedy. Watson gave mel boracis (℥j to ℥j of honey) with syrup of poppies equal parts, in the aphthous ulceration which attends the advanced stages of phthisis, and in cracked tongue. Stillé says that one of the most ordinary uses of borax is to remove the aphthæ which affect the mouth, fauces and anus of nursing children, apparently dependent upon an undue generation of acid in the prima viæ. It should be given internally, in doses of 3 to 10 grains a day, and associated with magnesia in some aromatic water; while a weak solution, or the glycerole of borax, is applied frequently to the mouth. Ringer advises the glycerine of borax, 1 to 8, in aphthæ and the curdy exudation of thrush, or muguet.

Clinical Reports.

Poisoning by Carbolic Acid treated by Apomorphia. By G. Wm. Semple, M. D., Hampton, Va.

On Sunday morning, *March* 25th, I was called on, at 8 A. M., by a gentleman who said his mother-in-law, a lady of about fifty years of age, delicate and in ill-health, had swallowed two teaspoonfuls of carbolic acid, which she had to apply to her plants to keep off insects, and asked whether it was likely to do any harm; and if so, to tell him what to do. On inquiry, I found it had been taken by mistake from a vial similar to one from which she was in the habit of taking about two teaspoonfuls of some pungent medicine of the same color. As he stated that she did not complain much of any burning sensation, I concluded it was only a weak solution of carbolic acid that would be used for such a purpose, and directed him to give a teaspoonful of bicarbonate of soda in a tumbler of water, thinking it might neutralize the acid (not having saccharated lime prepared); to give also a quantity of olive oil, to be followed immediately by twenty drops of extract of ipecac.

Fearing, however, that it might be concentrated carbolic acid that had been taken, I hurriedly put on my boots and coat and followed the gentleman to his house, not a hundred yards off. On my arrival I found the lady in the parlor, complaining of great debility and of a violent burning sensation from the fauces down to and in the stomach. The pulse was full, slow, regular and strong, not corresponding with the great muscular debility. She had taken the solution of bicarbonate of soda, and the oil had been sent for. I took out from my hypodermic syringe case a solution of apomorphia, but finding it discolored, and fearing that, by the deposition of carbon from the apomorphia, it had become inert, I hurried off to the apothecary for a fresh solution. At the door I met the messenger that had been sent for the oil. The apothecary was at breakfast. I went in haste to his house, about a hundred yards off, and he went with me immediately to his store. Having some difficulty in finding the apomorphia, the messenger was dispatched with the oil, and in a few minutes I followed, having determined to use the solution I had prepared, leaving directions with the apothecary to prepare the fresh solution and bring it to me as soon as ready. On my return, I found the patient could scarcely be aroused from a semi-comatose con-

dition. She could only with difficulty be made to understand any question; she could scarcely move her limbs, and when raised, they dropped like those of one dead drunk—as, indeed, she was. She had with difficulty been got to swallow about six ounces of olive oil. The pulse continued as before. At 8.40, twelve minims of the solution (of which ten minims contained one-half of a grain of apomorphia) was given by hypodermic injection. In three minutes, there was copious emesis, the matter thrown off consisting of the carbolic acid (as evidenced by its strong, peculiar odor), oil and water, with gastric secretions, the mixture being no more colored than might have been the result of the mixture of the oil. Violent efforts at emesis continued to recur about every twenty minutes for an hour and a half. As the patient could not be sufficiently aroused to the necessity, she could not be induced to take any drink, and there was only occasionally a little bile and mucus thrown up. There was no sinking or flagging of the pulse, and no coldness of the extremities. At a few minutes after 11 A. M., I left the patient with directions to give her an enema of olive oil, and to let her have only mucilage for drink. Before it could be administered, she had a copious, loose, feculent evacuation, and in a few moments a second rather watery, the two equal to a gallon chamberful, with the urine, which was very copious, and which continued to be freely and frequently discharged; was of a smoky color, and had a strong odor of the carbolic acid. It continued copious for twelve hours longer, but gradually became clear and lost the smell of carbolic acid.

At 1.30 P. M., the pulse was 96, full and regular; temperature, 101°F. The patient was considerably roused, readily answering questions; complained of burning as when first seen, only more intense, frequently requiring drink, of which she took, however, only a few swallows at a time. Left directions that she should have only mucilage to drink, and milk and water with lime water.

At 5 P. M., I found her in much the same condition, except that, not understanding my directions that she should take only mucilage and milk-and-water to be also a prohibition of other drink and food, and as she was very hungry, she had taken two eggs and a slice of toast, which she said felt like a ball of fire in the stomach. Left the same directions, positively prohibiting any other food or drink.

March 26th.—9 A. M., pulse 78. No fever heat; thirst considerably abated; burning sensation unabated; speaks in a whisper; epiglottis red and somewhat tumefied; tonsils and pharynx very red, but not much tumefied. Has had a healthy evacua-

tion, somewhat consistent. No fever heat; pulse the same; very hungry. Ordered same regimen and a mild detergent gargle.

9 P. M.—Sense of burning somewhat abated; other symptoms same. Continue directions.

27*th*, 9 *A. M.*—Symptoms same, except that there is further abatement of burning heat and diminished thirst, and the urine has become healthy. There is frequent cough, which seems to be caused by some of the copious ropy saliva passing under the badly adjusted, swollen epiglottis into the glottis, there being no increased bronchial secretion. Treatment continued. At night there was further abatement of symptoms, and next morning the patient was so much better as to be allowed for diet custard, jelly, soft-boiled eggs, and toast and tea. In a week she had so far recovered as to be able to return to her home in a neighboring town, her voice only occasionally falling to a whisper, and her cough greatly abated.

I congratulate myself that having provided and kept ready for use a solution of apomorphia certainly resulted in my saving one valuable life that would have been lost. It took an hour to prepare a solution, and the continued action of the poison for that greater length of time would certainly have resulted fatally. It would have taken at least as long to get ready and use a stomach pump, and it is much easier to suggest than to use the instrument. It is not to be supposed that any emetic introduced into the stomach could have overcome the anæsthetic effect of the poison and produced emesis. Apomorphia is the most prompt, certain and effective emetic; can be administered with or without the patient's consent, and acts with equal promptitude, whatever the contents of the stomach, and no danger of prostration is to be apprehended. Let me exhort every physician to be always prepared for such an emergency. Can no stable solution be made?

P. S.—I have omitted to state that the patient, having lost the sense of smell, did not discover the smell of the acid, and the medicine for which it was substituted was very pungent. She had so long taken the medicine from a similar vial that she was quite sure she had the right bottle. She got at least two teaspoonfuls. It was taken from a vial in which extract of vanilla had been sold, and the apothecary who sold it merely wrote "carbolic acid" on the vanilla label, without any cautionary mark. The party to whom it was sold was known, however, to the vendor, to be an apothecary.

Salicylic Acid in Rheumatism. By W. B. CONWAY, M. D., Surgeon to Agricultural and Mechanical College, Blacksburg, Va.

Your report before the Richmond Academy of Medicine (noted in the April number of the *Monthly*), in regard to the good effects of salicylic acid upon yourself as well as upon some of your patients, for acute articular rheumatism, calls to mind a case which I treated with the acid, which, however, did not relieve my patient quite as speedily as in your case. The disease is quite prevalent in our mountainous country, and I have never succeeded in relieving my patient by the alkaline treatment in less than from four to six weeks. The case is as follows:

On April 8, 1870, I was called to see Miss Emma F———, aged 17; stout, robust, previous health very good. I found her with fever, furred tongue, constipation; skin dry and hot; pulse 130; some pain about the region of the heart. Prescribed calomel and rhubarb, $\overline{aa}$ grains five, followed by Epsom salts.

April 9. Pulse 128; feet, ankles, shoulders and arms greatly swollen, red, and painful; more or less pain throughout the whole system. I gave the acid as prescribed by Dr. G. M. Roberts, in your March number.

℞ Acid salicylic.....
Sodæ bi carb..... $\overline{aa}$ ʒiiss.
Spts. nitr. dulc. .....
Aquæ..... $\overline{aa}$ ʒij.
M. Sig. Tablespoonful every 3 hours.

April 10. Pulse 120; swelling less; tongue cleaning, skin very moist; pain lessening; continue the acid treatment.

April 11. Pulse 96. All symptoms better; pain scarcely felt. Take Epsom salts to open the bowels. Continue the treatment.

April 11. Found her sitting up; pulse 76. Entirely easy; discontinued the acid, and on the 13th she was walking about the premises, and expressed herself as entirely well.

Anæsthetic Mixture.—℞. Powdered camphor, four drachms, sulphuric ether, one ounce. Mix and dissolve. On applying the mixture for a minute or so to the part where a superficial operation is to be practised, local anæsthesia is temporarily produced.—*Louisville Med. News*, March 10, 1877.

Bromohydrate of Cicutine.—Dr. Boyland says (*Clinic*, April 11, 1877), cicutine is the alkaloid of the herba cicutæ from the conium maculatum. It is especially useful in all cases where a narcotic is indicated. Dose, $\frac{1}{100}$th to $\frac{1}{50}$th grain.

Correspondence.

RICHMOND, VA., April 9, 1877.

Mr. Editor,—In the report of a *Case of Acute Rheumatism Requiring Amputation of the Leg*, by Dr. Hume Field, in the January number (1877) of the *Medical Monthly*, the author refers to the report of a case made by me in the *Transactions of the Medical Society of Virginia*, for 1871, and adds that I do "not state the termination of the case."

For the information of all interested in the case I reported in 1871, I will state that I wrote to my father, Dr. Wm. A. Gray, residing in the neighborhood of the patient, from whom I have just received the following reply:

"As requested by you, I have visited D. H., and was most agreeably surprised to find him well and hearty, and walking (of course on crutches) daily to school—a distance of nearly two miles. Although there is considerable deformity of the leg, which is shortened about six inches, the extremities of the bones are pretty firmly re-united, and he can bear his whole weight upon the limb. His general health is very good, and he is quite robust, suffers but little pain at any time, and rests well at night. I doubt whether you would recognize him."

Very truly, &c.,

WM. B. GRAY, M. D.

Original Translations.

From the French and German.

Laryngeal and Pharyngeal Troubles in Locomoter Ataxia.—A case in which troubles of this sort arose during the course of locomotor ataxia, was reported to the Société Anatomique at the November meeting, 1876, by M. Budin for M. Jean. We take the following report of it from *Le Progres Medical*, for February 3d, 1877:

The ataxic symptoms, as is usually the case, were limited to the lower extremities. An examination, even with the naked eye, showed that the posterior columns of the spinal cord were diseased only in the dorso-lumbar region, whilst in the cervical region the bands of Goll only were invaded by the sclerosis. In the cases observed by Charcot and Pierret, these bands were

perfectly sound. Furthermore, this patient experienced a very distressing sensation of heat internally, without there being any elevation of temperature externally to account for it. This sensation has been observed by M. Charcot in paralysis agitans, but it has not heretofore been remarked upon in connection with locomotor ataxia.

The laryngo-pharyngeal symptoms, which gave to the case its chief interest, were similar to those described by Féréol in 1868. He published five cases in which ataxics suffered from spasmodic attacks of coughing, very similar in character to whooping cough, but no autopsy could be obtained in any of these cases.

M. Oulmont had seen a similar case which was reported by M. Michel. The patient was a man forty-four years old, an ataxic since 1870. Every morning he had violent paroxysms of coughing, which were characterized by many short expirations and a gradual, musical inspiration. He generally had five or six such fits of coughing, during which the face was greatly congested and the eyes protruded. The attacks were terminated by the vomiting of a quantity of mucus. The same laryngeal troubles existed in a woman thirty-eight years of age, who was a patient of Dr. Frémy, and had been an ataxic for four months. The barking cough, however, was less marked in this case than in the preceding.

The only autopsy in a case of laryngeal ataxia is reported in a memoir published by M. Bourdon in 1862. This case, which occurred in 1825, is reported by Cruveilhier. Conversation in this case caused great fatigue; speech was sudden and abrupt, enfeebled and accompanied by the most singular grimaces, which were always made worse by an effort to prevent them. The muscles of deglutition and respiration were effected in a manner similar to those of the face and larynx. The respiratory movements were feeble and jerky. At the autopsy, the posterior median cords were found to be transformed into a hardened, greyish band, extending the whole length of the spinal marrow. Superiorly, the diseased columns passed into the restiform body, and from thence upwards, to terminate on a level with the cerebellum.

In the present case, reported by Jean, the lesion of the cord was found to have been propagated to the posterior part of the bulb. The posterior pyramids were small, atrophied and very distinctly grey in color; the restiform bodies were also indurated. But the lesion did not remain purely central. Examition with the naked eye revealed a very manifest diminution in volume of the pneumogastric and spinal accessory nerves of the left-side which arose from the indurated bulbar region. This indi-

cated that the nuclei of origin of these nerves were diseased and that the troubles were analogous to those cephalic phenomena observed by M. Pierret in the course of locomotor ataxia. The central lesion, and consequently the lesion of the nerve which was a consequence of it, gave rise to the pain, paralysis and incoördination in the region supplied by the pneumogastric nerve. Thus are explained in part, at least, these laryngeal symptoms, which are analogous to the darting pains observed in the limbs.

The investigations of M. Charcot have shown that secondary muscular atrophy is not very rare in the course of locomotor ataxia. In this case the "amyotrophy," instead of occupying the muscles of the limbs, was situated in the thyro-arytenoid muscle, but it always follows the same course, and the atrophy in this case probably had some connection with the laryngeal symptoms.

Finally, although there was no visible alteration in the essential pharyngeal muscles, the alteration in the filaments of the recurrent nerve was sufficient to account for the spasmodic movements during deglutition.

A Contribution to the Study of Trephining.—Some cases have recently been reported which illustrate in a very striking manner the practical results of the recent advances in our knowledge of the localization of cerebral lesions. On the 7th of February last, M. Lucas-Championniere reported to the Société de Chirurgie, a case in which, after an injury to the head, the nature of which is not mentioned, there supervened immediately a paralysis of the right arm (with the exception of the muscles which move the shoulder), and a very marked aphasia. There was no anæsthesia. On the fifth day there were some epileptiform attacks which recurred in the night between the sixth and seventh day. On the eighth day trephining was practised. The patient had no wound and no depression of the cranium, and the operation had to be performed somewhat "in the dark." Four days after the operation the paralysis of the arm had disappeared, and on the fourteenth day there was no longer any aphasia. This is, thus far, the only *successful* case reported recently. Two other cases have recently been reported. One was by M. Proust on the twentieth day after the accident, which M. Duret thinks was so long afterwards that the lesion was no longer limited; and the other was by M. Gosselin only about two hours after the receipt of the injury. In this case the brain substance was considerably broken up.

It is somewhat remarkable that the only successful case should have been that in which there was no *external* wound whatever to give any clue to the seat of the intracranial lesion, which was determined solely by the muscles which were paralyzed.

As M. Championniere justly says, we are still far from having a thorough knowledge of cerebral localizations, but a great step has unquestionably been made in this direction, and we can look forward with considerable certainty to further advances in the near future. The motor centres, says M. Championniere, as is well known, lie in a comparatively restricted space along the fissure of Rolando. The important point then, is to determine the situation of this fissure with accuracy, and he gives the following directions for this purpose:

The upper extremity of the Rolandic line, as M. C. calls it, is situated about $2\frac{1}{4}$ inches behind the bregma. The bregma, as is well known, is the point at which a line passing directly across the top of the head, from one external auditory meatus to the other, crosses the sagittal suture. The lower extremity is determined by drawing a *horizontal* line from the external angle of the orbit backwards, a distance of $2\frac{4}{5}$ inches, and then from the outer extremity of this, erecting a perpendicular $1\frac{1}{5}$ inches in height. The upper extremity of this perpendicular line will correspond with the lower extremity of the fissure of Rolando, and a line connecting the two points thus forme will correspond in the main with the fissure itself. M. C. advises that the trephine be applied to the *upper*, *middle*, or *lower* part of this line, according as the primary troubles are in the inferior members, the superior members, or the face. Practically, however, he considers it unimportant in most cases to observe this point very strictly as the motor centres lie in a very restricted space, and a trephine applied over the middle of the Rolandic line would be sufficiently accurately placed.

Diphtheria.—An article on this subject has recently appeared in the *Allg. Weiner Med. Zeitung*, by Dr. Luzinsky. He arrives at the following conclusions concerning the disease:

1. Diphtheria and croup are one and the same affection, identical in their nature and differing only in their seat, and frequently only in their name.

2. Diphtheria is a general disease due to a peculiar alteration of the blood, with a tendency to the coagulation of fibrin in and upon different organs.

3. It is of miasmatic origin; its contagiousness has not been proven.

4. Diphtheria may cause death by the violence of the blood poisoning; by the formation of the exudation on some organ essential to life, whose functional activity is thereby prevented; by the formation of abscesses, and blood poisoning therefrom, by prostration, anæmia, uræmia or paralysis.

5. The disease is often so mild, in all respects, as to require no treatment, which may sometimes even do harm.

6. At other times proves rebellious to all the remedies at our command.

7. In many cases, however, treatment will be very successful when the diagnosis is made sufficiently early.

8. The treatment is to be directed chiefly to the changes in the condition of the blood; the tendency to fibrinous exudation and coagulation is however to be borne in mind, and the alkalies, such as the carbonate of soda and chlorate of potash given as solvents.

[The Translator has used, in a few cases, carbolic acid in combination with muriated tincture of iron and glycerine, with excellent results. This mode of treatment was recommended by Dr. John Byrne, of Brooklyn, who stated to the writer that it had proved more efficacious than any other, in his hands.*]

9. Should the false membrane obstruct the throat, its extension is to be prevented by the application of cold astringant substances, and the actual removal of the membrane itself.

10. Should the diphtheritic exudation be located in the larynx-trachea or bronchial tubes, the inhalation of solvent remedies should be practised.

11. Emetics are only of service for the removal of loose exudation from the air passages.

12. Tracheotomy can only furnish good results when the exudation is confined, for the most part at least, to the larynx, the bronchia and lungs being unaffected. It should sometimes be employed, however, when there is no hope of recovery, to make death easier [by removing the feeling of suffocation].

In an admirable report of an outbreak of diphtheria in the town of Corbie (France), in the *Union Medicale et Scientifique du Nord-est*, for March 31st, 1877, we find six cases reported in which the larynx suffered from a deposit of false membrane. In three of these, tracheotomy was performed, with two recoveries and one death. Of the other three who were not operated upon, *none* recovered.

The Therapeutic Action of Salicin.—Dr. Senator (*Allg. Wien. Med. Zeitung*, March 6th, 1877,) thinks the action of salicin due to its conversion in the blood into salicylic acid. Its antipyretic action is unquestionable. In typhus fever, in moderate and large doses, it acts much less certainly than either quinine, or salicylic acid. It has no injurious effects on the digestive

*This is virtually the treatment recommended above all others in Dr. J. Lewis Smith's exceedingly valuable work on *Diseases of Children*. The Editor has used the prescription with marked benefit in two cases recently.

organs. It has been chiefly employed for the elevations of temperature in the early stages of pulmonary phthisis, sometimes with and sometimes without beneficial results. It does not act so rapidly or powerfully as salicylic acid, but its effects are more permanent. With reference to its antiseptic action, Dr. Senator states that in two cases of vesical catarrh, he has derived no benefit from its use. Nine cases of rheumatism, in which he has used it, have been followed by no bad results; the complications which so frequently arise in this affection, seem to be, in a measure, prevented by the salicin, though they somotimes occur nevertheless. It sometimes acts well for the relief of pain, when given for sometime, just as salicylic acid does. In arthritis deformans and gout, it sometimes causes marked relief from pain. It has been used in diabetes mellitus without benefit. Salicylate of soda is useful, apparently on account of the soda which it contains. In those cases where the temperature rises suddenly and rapidly to quite a high point, salicin has very little effect. Its chief use is in the protracted fevers of lower grade.

Treatment of Vesical Catarrh.—Dr. Edlefsen recommends, in a late number of the *Deutsch. Archiv. f. Klin. Med.*, for catarrh of the bladder, oil of turpentine and balsam of copaiva. The turpentine should be given in doses of ten drops, four or five times a day. The alkaline urine will soon become acid. Should strangury or hæmaturia come on, or such other affection as nephritis, etc., the turpentine would be contraindicated, and Dr. E. then recommends chlorate of potash internally, in doses of twenty grains, every two or three hours. The subjective and objective symptoms rapidly abate under this mode of treatment. When the catarrh of the bladder is due to gonorrhœa, the author strongly reccommends balsam of copaiva.

Proceedings of Societies.

TEXAS STATE MEDICAL ASSOCIATION.

Galveston, April 3d.—Dr. B. H. Harrison, of Columbus, President, in the Chair; Dr. W. A. East, Hallettsville, Secretary. After prayer by Dr. R. F. Bunting, Dr. Greensville Dowell delivered the address of welcome.

An invitation from the ladies of the Baptist Church to a banquet was accepted.

During the afternoon, Dr. Eugene Palmer, of Houston, Chairman, etc., read an interesting report on climatology, which was replete with historical and classical deductions. Referred to Publishing Committee.

April 4th.—The resolution introduced yesterday endorsing the action of the Travis County Society in refusing to treat with

irregulars, was called up. Dr. J. B. Robertson, of Independence, said that to adopt the resolution would be but to array the Association against the laws of the State. It would be tantamount to warning the district judges that they must either obey the laws they had sworn to enforce, or, ignoring them, fall back upon the Medical Society for instruction and guidance. Wherever legislatures had endeavored to suppress irregular practitioners they had but strengthened them in their claims upon the people for support.

Dr. Wooten thought that all the district judges, with one exception, were in sympathy with the Travis County Society. He read an argument in support of the course taken by the Society.

Dr. Sayers, of Waco, regarded the organization as based upon the desire to elevate the standard of the profession. He thought it beneath the dignity of the Association to treat with an error of any kind, and particularly one that aimed its consequences against the safety of humanity. Defeat of the resolution would result in the disintegration of the Association, and would invite popular disgust.

Dr. Pope thought that Crockett's motto, "be sure you are right, then go ahead," should rule in coursing the acts of the Association on this question. Since the law had been passed, the regular practitioners were bound by its provisions. The law requires the Boards to be thorough in their examinations. If they respected this injunction, the standard of the profession could suffer no detriment. The law gives many franchises to the profession that should be cherished, and enables regular practitioners to debar objectionable characters from the privileges of a practising physician. Instances had arisen under his own observation in which the law had been successfully applied in suppressing quacks. He was unwilling to overlook the virtues of the existing law in order to gratify the demands of an isolated case. He denied that the law required a violation of the ethics of the profession when it gave to homœopathists the right to apply for examination; nor did he believe it a violation of regular rules for regular doctors to consult with irregulars, provided the consultation was not on the merits of humbug, which was the case whenever the ten thousandth part of a grain of anything was prescribed to be given for anything.

Dr. Holland said, if this Association was a part of the American Medical Association, it was bound by the rules of that body. A similar question to the one under discussion had been decided by the American Medical Association, which went up to it from Michigan.

Dr. Ross rose to a personal explanation. He was appointed

by the Judge to sit upon the Board of Examiners, and accepted the position to protect it against the attacks of ignorant men. If the matter be treated prudently, in six months the issue would die out of its own folly. As a member of the Board he acted as an officer of the law, and not as a physician. He held no medical consultation with homœopathists, and never would recognize them.

Dr. Cupples commended the sentiment that would defer the subject to a future time for adjudication. He complimented Dr. Ross for the manly stand he had taken. If the relationship with the American Medical Association were to be kept up, the Convention was bound to sustain the resolution.

Dr. Burroughs said, the wording of the resolution did not criminate Dr. Ross, and that he was not on trial; that the Travis County Society had refused to affiliate or treat with irregular practitioners; all that was asked was to say that the Travis County Society had done what was right and proper. Thought every doctor who consents to serve on an Examining Board should protest against irregular men being admitted. This was all that could be done under the law as it now existed.

Dr. Dowell said, that in voting for the resolution the Convention opposes, not the law, but the unjust judge who had improperly executed it.

Dr. Ashbel Smith said that Dr. Robertson had taken a position that could not be assailed. To oppose the law would be to invite the direst misfortunes upon the best interests of the profession. Supposing that Dr. Ross and other competent men had refused to sit upon the Examining Board, it would have resulted in arming the charlatans with all the advantages the law sought to confide to regular practitioners. The exercise of the right of suffrage brought all clases together in a common interest, but because he voted with a negro it was not the result of his own will or the work of his hand, but he voted notwithstanding. It was the fault of the law and not of the profession. There was no professional ethics involved in the question. The duties of the Board were simply ministerial. Liberty had been defined by old Prof. Gregory to be the right to go hell in any way the traveler in that direction might elect; and so the people of Texas, in the exercise of their sovereign rights, might patronize and would patronize medicine or homœopathy, just as they might choose to select, and this Association was powerless to remedy the evil. The Association should hold fast to what it had and not give up the laws and their benefits because a few homœopathic advocates had demanded them for their own uses. He moved that the resolution be postponed for six months, which was sustained by 39 ayes, to 35 noes.

After adjournment, the body visited St. Mary's and the city hospitals.

A popular audience having assembled at 8 P. M., Dr. Towsey, of the Local Committee, introduced Dr. B. H. Harrison, who delivered an address on Medical Education.

Dr. Eugene Palmer followed in a lengthy address on Vegetable Vitality.

April 5th.—Dr. Denton moved a reconsideration of the vote on Dr. Smith's motion carried yesterday. He favored some action that would do justice to the Travis County Society, which simply asked to have the ethics of the profession vindicated. Only two of the twenty-seven judges in the State had placed irregulars on Examining Boards.

Dr. Ross said several members have left, and he thought it unjust to take snap judgment on the precedent they had established by their votes yesterday.

Dr. Wooten said the Travis County Society felt conscious of the rectitude of their cause, and simply asked to be vindicated or condemned.

Motion to reconsider was carried.

After the reading of the original resolution, Dr. Robertson said he did not fully indorse Dr. Smith's motion of yesterday. If the resolution be adopted, a stigma would be placed upon a worthy member of the Society. He offered a substitute, throwing the weight of the objections of the Association against the judge who made the appointment, and not against Dr. Ross.

Dr. Trueheart offered an amendment to the resolution, which endorsed the action of the Travis County Society, and exonerated Dr. Ross from all censure, and concluded by suggesting the framing of a law giving the power of appointing the examiners to the supreme judges.

Dr. Dowell said, that if the Association endorsed Dr. Ross, it could secure no recognition by the American Medical Association. If the resolution did not pass, there would be a new State organization formed, which would pass it. He asked the Association for God's sake to pass the resolution. Carried.

Dr. Cupples moved that the Convention exonerate Dr. Ross from blame, and that the operation of the resolution passed take its effect for the future. Carried unanimously.

During the afternoon, the Committee on Nominations, through its Chairman, Dr. Campbell, reported the following nominations, which were confirmed: For President, Dr. Kelley, of Galveston; Vice-Presidents, Drs. Cupples, of San Antonio, Swearinger, of Austin, Sayers, of Waco; Treasurer, Dr. Achison, of Denison.

The banquet was a grand affair, gotten up under the imme-

diate supervision of Mr. Pearce, the manager of the Tremont Hotel.

Dr. Sayers submitted a paper requiring an explanation of physicians of Houston, who had recognized an empyrean. Explanations were made.

Drs. Bibb, Rutherford and Goldman, read papers which were referred to Publishing Committee.

Dr. Burroughs read a paper on Stone in the Bladder, which was written by Col. Work, and was descriptive of his feelings while suffering from the disease. He also exhibited several specimens of stone, among the number a mad-stone.

Dr. Kilpatrick referred to the resin weed spoken of by the patient; he had tried it rose; to add his recommendation to its virtues.

Dr. Powell made some comments on the treatment of stone, and gave a graphic account of an operation he had performed.

Dr. Pope reported for the Committee on Organization, suggesting some minor changes in the plan heretofore reported.

Dr. Park exhibited an instrument improved by Dr. Manning, the uses of which he explained.

Dr. Sayers moved that the address of the President and the lecture of Dr. Palmer, be referred to the Publishing Committee. Carried.

Dr. Palmer offered the following: Whereas, the members of our profession are subject to be called, sometimes in obedience to subpœna summons, or by City Councils, to act as experts; and, whereas, courts of justice have paid for such service as experts, fees of only $2.50, and that City Councils have refused to pay for such service; therefore be it resolved, that this Association sustain any of its members in demanding a just and liberal fee for such services.

Held for action under a suspension of the rules.

Dr. Wise read a paper advocating the claims of the Texas Medical College.

Dr. Dowell exhibited a little boy suffering with cancer, and explained, at length, the means he had resorted to in its treatment.

Dr. Herff was called upon, and responded in a few remarks, touching the character and treatment of cancer.

Dr. Wooten related his experience in the treatment of cancer.

Dr. Sayers reported a discovery of a new property of chromic acid.

Dr. Caruthers also made some remarks touching the treatment of cancer.

The Committee on Nominations nominated, through Dr.

Campbell, Chairman, the following named reporters: Section, on Practice of Medicine and Materia Medica, Dr. Heard, Chairman, Dr. Wilkinson, Secretary; on Obstetrics and Diseases of Women and Children, Dr. Herff, Chairman, Dr. A. N. Denton, Secretary; on Surgery and Anatomy, Dr. Wooten, Chairman, Dr. Manning, Secretary; on Medical Jurisprudence, Chemistry and Psychology, Dr. Ganahl, Chairman, Dr. Burroughs, Secretary; on State Medicine and Public Hygiene, Dr. A. R. Kilpatrick, Chairman, Dr. Willis, Secretary. Committee on Publication, Drs. J. A. Pope, Chairman: E. P. Johnson, E. Blocker, S. S. Vaughn and A. B. DeLoach. Committee on Arrangements, Drs. Herff, Chairman, and Denton. Committee on Prize Essays, Drs. Eagan, Thurston, Carrington, Walton, and Pope, of Marshall. Dr. East, Secretary, was authorized to appoint the Committee on Necrology. Judical Committee, Drs. J. B. Robertson, Ashbel Smith, C. Campbell, George Cupples, S. M. Welch, B. M. Eads, H. W. Brown, L. E. Locke, B. H. Harrison, Holland, T. M. Marks, J. W. Fennell, A. E. Caruthers, A. C. Walker, D. F. Stuart, F. E. Hughes, J. M. Ross, Burke, of Corpus Christi, A. B. De Loach and H. B. Renfro.

Dr. Denton moved the reference of the address of Dr. Wise, and the papers on the Secretary's table, to the Committee on Publication. Carried.

Dr. Kilpatrick submitted a report of rainfall in Grimes county for the past year. Referred to Publishing Committee.

Dr. Kilpatrick read a paper on the treatment of a case in practice. Referred to Publishing Committee.

Dr. Denton moved that a committee of three be appointed to draft rules for the government of the next session. Carried. Drs. Caruthers, Dowell, and Denton were appointed.

The Secretary read his reports for the past year. Received and adopted.

The President read the following appointments to the National Convention: Delegates—Drs. E. B. Blocker, A. E. Caruthers, J. M. Welch, J. J. Burroughs, H. K. Leake, J. J. Larendon, J. H. Sayers, E. J. Bell, A. N. Denton, T. S. Burk, W. A. East, A. G. Clopton, S. Eagan, M. A. Taylor, McCutchan, E. J. Beall, H. F. Hoaks. Alternates—Drs. T. H. Johnson, E. T. Dale, T. Colley, J. B. C. Renfro, McKenzie Johnson, F. M. Hall, T. W. Wiley.

The President appointed Dr. Manning as essayist, and Dr. Paine as alternate.

Convention adjourned to meet in San Antonio on the first Tuesday in April, 1878.

After the Association had adjourned, it remained for the

members to end the session by a cruise on the Bay, which had been provided for by the Committee of Arrangements. Captain Pease, of the revenue cutter W. H. Seward, kindly tendered the use of his vessel to the members of the Association. A large representation of the Association was present; the pleasures of the trip were heightened by the company of ladies.

Book Notices, &c.

Myelitis of the Anterior Horns, or Spinal Paralysis of the Adult and Child. By E. C. SEGUIN, M. D., Clinical Professor of Diseases of the Mind and Nervous System in College of Physicians and Surgeons, N. Y. New York: G. P. Putnam's Sons, 1877. (From Publishers. Pp. 120.)

Dr. Seguin in this book reports 46 cases of the disease—all that he could find in the journals, &c., and that have come under his observation—and after applying the inductive method of study to these reports, he comes to the following conclusions:

1. Careful study of a large number of cases of disease shows that there is an affection common to all ages of life, characterized by atrophic paralysis of one or more limbs, rarely of other parts, loss of faradic reaction, and diminution or loss of galvanic reaction in the paralyzed muscles; by remarkable freedom from anæsthesia and retention of urine, and absence of bed-sores; and by temporary numbness and referred pains.

2. The course of the disease in children, is nearly always acute; in about fifty per cent. of cases acute and febrile. In adults it runs an acute febrile, an acute non-febrile, a sub-acute febrile, a sub-acute non-febrile, or a chronic course. The last-named type of the disease is rare—excessively so in children.

3. In adults and in children the lesion of the spinal cord consists in myelitis of the anterior horns, with atrophy (through granular degeneration) of the ganglion cells of this part. The motor cells constituting the trophic centre (Waller's law) of nerve trunks are destroyed, and the resulting atrophic paralysis greatly resembles that of peripheral paralysis.

4. The causes of myelitis of the anterior horns are: Predisposing; age and sex. In childhood the two sexes are about equally liable to the disease, and are more frequently attacked when from one to four years of age. Adult males are much more often affected than women; and the best years of life, twenty to thirty-five years, are those during which the disease occurs. Exciting causes;—the only one that we have good reason to be-

lieve effectual is the impression of cold or dampness; the affection is often, consequently, a paralysis *â frigore*.

5. The treatment consists in the heroic use of antiphlogistic means, such as counter-irritation to the spinal region, the internal administration of ergot, belladonna, iodide of potassium, during the acute and sub-acute stages of the disease; and of the judicious use of galvanism, faradism, massage, douches, tonic and supporting treatment, and orthœpedic apparatus during the stage of residual atrophy.

6. The prognosis is very good as regards life, but unfavorable with respect to function of paralyzed parts; very few patients recover perfectly from myelitis of the anterior horns.

We have room only to add that this is a most carefully prepared and valuable contribution to a new and important subject. We say *new*, because so experienced a physician as Prof. J. Russell Reynolds, of London, writing in the *Lancet* in 1868, says, apart "from pregnancy, I do not know of any disease in the adult which exhibits the clinical history now detailed."

The Mortality of Surgical Operations in the Upper Lake States, Compared with that of other Regions. By EDMUND ANDREWS, A. M., M. D., Professor Surgery in the Chicago Medical College.

This is a valuable contribution to surgical literature, and the author deserves the thanks of every surgeon for the time and immense labor he has spent on this work. The statistics of nearly every important surgical operation are given, not only of the Lake States, but from other regions, and the views of many eminent writers respecting the operations are also presented in a brief but satisfactory manner. The reader can obtain in a few moments the general results of any surgical operation he may be interested in. The pamphlet will be a valuable addition to every medical library.

Therapeutic Use of Faradaic and Galvanic Currents in the Electro-Thermal Bath, with History of Cases. By JUSTIN HAYES, M. D., Chicago: Jansen, McClurg & Co., 1877, (12 mo. pp. 112. Price, $1.25. From Publishers).

There is throughout this work a style of writing which partakes too much of the kind adopted by the enthusiast. Yet, aside from this objection, the book contains a good deal of practical information which is given the reader in an unpretentious style. He thinks that the electro-thermal bath "is a boon of greater value to her [woman] than has been discovered during the last fifty years."

Editorial.

DISCOVERY OF ANÆSTHESIA.

We lay before our readers, in the present number of the *Medical Monthly*, an intensely interesting paper bearing on the Discovery of Anæsthesia, from the pen of the world-renowned J. Marion Sims, M. D. The evidence contained in this paper, establishing the claim of Dr. Crawford W. Long, of Athens, Ga., to the credit of this discovery, is positively incontrovertible. And yet, Dr. Sims has presented it in such a manner as to detract nothing from the fame of other contestants for this distinction. It will be conceded by all that Dr. Sims deserves the thanks of the profession for his patient and laborious research in settling this question at a *time*, and in a *manner*, that must divest it of any doubt or obscurity for the future. The recommendation contained in the conclusion of the paper is as creditable to the generous *heart* of Dr. Sims, as the article, considered as a whole, is to his noble head and brilliant intellect. We sincerely hope that the profession generally will unite in the efforts to secure the object proposed. Let us blend the names of these public benefactors in an *act* that will show a just appreciation of their respective merits; and we trust it may be the pleasure of all regularly organized medical bodies to take some steps looking to the end proposed. It is due to the *families* of these noble benefactors of the race that some mark of appreciation should be made from the public Treasury for their benefit. A united active effort on the part of the profession can secure this desirable end. Will any one withhold his influence?

The admirably executed steel-plate engravings of Dr. Long and of Horace Wells, which accompany the article of Dr. Sims, cannot fail to enhance the value of the article itself. The heavy extra expense which we have cheerfully incurred in getting out this issue of the *Monthly*, we feel sure, will be duly appreciated by our subscribers everywhere. Dr. Sims must excuse us for alluding to his generous aid in helping us to make this number specially attractive.

The Medical Society of New Jersey will convene in Trenton Tuesday, May 22d. Dr. Wm. Pierson, Orange, N. J., Secretary.

Speakers in Medical Societies.—The following extract from the recent address of a retiring President of a Medical Society of Chicago has a practical bearing, which will be appreciated by many, and may result in good. We appropriate a part of these remarks to ourselves. Who else will take a share?

"It is to be regretted that some members of medical societies have a disposition to speak too often. They have a sort of *cacoethus loquendi*, and are frequently on their feet to say something not always worthy of themselves or of the society. I should not have alluded to this habit had not personal experience shown me that it is very easily acquired, and frequently attaches to the best men. As a check upon it, one might well ask himself before rising to speak whether what he has to communicate is of sufficient importance to justify him in occupying the time of the society.

"It may be well to call the attention of some of our less experienced associates to a practice very common and tending very much to mar the pleasure and profit of an evening. I refer to the most pernicious habit of leaving the main subject of discussion, and slipping away to speak of something having no proper connection with the matter in hand. It can hardly be possible that anyone here has failed to notice this want of what might be called *unity of attention* on the part of many speakers at medical societies. Yet, to make myself thoroughly understood, I will illustrate my meaning: The subject for discussion is cholera; some one speaks of transfusion in the treatment of the disease. At the next moment a gentleman may "like to ask the members present if transfusion of blood for post partum hemorrhage had ever been performed in this city, and, if so, what was the method adopted. He had often thought since the discovery by Barnes of a means of arresting the flooding by the solution of the sesqui-chloride of iron, that there was much more reason to hope for success from transfusion now than formerly." Then arises a third party and "calls the attention of the society" to the fact "that some of the best men in England regard Barnes' plan of injecting the uterus as dangerous, and pointing out some instances in which septicæmia seemed to follow the practice." Then a fourth member remarks "that the fatal results in these cases were probably not to be attributed to septicæmia, pyæmia, or any toxic condition of the blood, but, in all probability, to *thrombosis*." And so it will be found that the discussion has run over several of the branches of medicine so superficially as to benefit no one, and with no other result than to bring about an unsatisfactory adjournment. Such a congeries of subjects,

thus huddled together, in their disorderly adjustment and frail and random connection, remind me of nothing so much as of a handfull of nails hanging from a magnet.

"If we were prepared to say intellection is only the result of cell action, as members of a society proposing to be useful, we should see to it that the cells of thought arrange themselves into definite shapes, and do not heapup into unsightly excrescences."

Our Advertising Department is smaller in this issue than it was last month, because of the omission of the "institches" of Messrs. Reed & Carnrick, E. Fougera & Co., etc. Just as we are going to press with the last form of this number, we have received an official communication, stating that a decision of the Postmaster General prohibits journals from "receiving printed advertisements from other cities to be stitched in between the pages" of such journals. Hereafter, advertisements are to be printed at the office of publication, and on paper of the same size as the journal.

Such a decision is ill-timed, savors of petty tyranny, is unbecoming the dignity of a Republican form of government, is oppressive in its nature, damaging to commercial interests and should excite indignation. Whatever may be technicalities of the law behind which the officials may screen themselves from formal censure or public rebuke, it would have been no more than just that the suddenly changed construction of the law, should have been made generally known before such an exceptional ruling was put into effect.

What we have said will serve as an explanation to our New York subscribers who had to pay extra postage on the April number. This is the only Office in the United States from which we have yet heard complaint. The first information we had of such a decision by the Washington authorities was a short paragraph in the daily papers of this city of May 7th; and on May 8th, we received official information that "it having been represented to the Postmaster General," etc.

Hereafter, no advertisements can be received by the *Monthly* except such as are printed at its office of publication, and on pages of the same size as the rest of the journal. We suppose, however, that we are yet at liberty to use tinted or white paper, thin or thick, as our means will justify, or as our preference may incline. And although, according to the decision above made, we cannot publish an advertisement that is larger than a page of our journal, we suppose we are at liberty to institch engravings printed in other cities, maps of any size and such other things, as may interest and profit our subscribers. At least we risk this

issue with engravings printed in New York city, and will await official decision.

It is unfortunate in seeking reformation that the ruling of the Postoffice Department affects chiefly the scientific journals of the country. Daily and weekly newspapers, which carry political influence with them, do not permit institches for reasons which are apparent, and are therefore exempt from the petty annoyance to which the medical and other journals of the country are now subjected.

Ergotin Enemata for Hæmorrhoidal Bleeding.—The *Monthly Abstract of Medical Sciences* (April, 1877), copies from the *London Medical Record* the statement that "K. Strisower describes in the *Moskowa Med. Gaseta*, No. 13, 1876 (abstract in St. Petersburg *Med. Wochenscrift*. No. 9, and *Allgemeine Med.-Chir. Zeitung*, No. 51), the case of a man, aged 35, who had suffered for six months from profuse hæmorrhoidal bleedings, which had resisted all treatment; only once, solution of perchloride of iron arrested the hæmorrhage for ten days. The patient's strength was greatly reduced. Strisower intended to inject ergotin subcutaneously, but was prevented by the patient who feared the pain. He then injected a clyster containing five grains of ergotin in two ounces of glycerine. Ten days later, there had been no further bleeding, and in six weeks the patient had had no return of the hæmorrhage, and was steadily regaining his health."

By reference to the November number (1874) of the *Medical Monthly*, page 489, it will be seen that Dr. G. Wm. Semple, of Hampton, Va., contributed a paper to our journal on the *Treatment of Piles and Prolapsus of the Rectum by Injections into the Rectum of Extract of Ergot.* Since this publication, we have several times seen in exchanges, at home and abroad, favorable reports concerning this plan of treatment, but so far as we are aware, Dr. Semple is entitled to the credit of having introduced the plan of treatment which has had such excellent results.

The New Jersey Pharmacy Law lately enacted requires that "every pharmacy or store kept open for the retailing, dispensing and compounding of medicines shall be under the direct personal care and management of a registered pharmacist." A registered pharmacist is one who satisfies the State Board of Pharmacy of his fitness. The Board of Pharmacy is composed of five pharmacists appointed by the Governor from nominations made by the New Jersey Association. The penalty is $50 for each violation of the law.

Authorship of Hydrobromic Acid.—Writers in some of the journals give Dr. J. Milner Fothergill, of the West London Hospital, the credit of its discovery. He has abundantly tested the article and gives it his endorsement, but in his report of its use (*British Medical Journal*, July 8, 1876) he lays no claim to the honor of its discovery, but places that where it properly belongs, to Dr. D. W. C. Wade, of Holly, Michigan. The article was first given to the profession by Dr. Wade in the *Peninsular Journal of Medicine*, February, 1875. The doctor first prescribed it in May, 1874, which was undoubtedly the first time it had ever been ordered. Since that time he has prescribed several gallons of it with the most gratifying success in relieving the cerebral effects of quinine. In addition to this, it is useful in other directions, as the article by Dr. Wade above referred to, suggests: "Effects may be expected from the acid that are not obtained from the bromides. For instance, it appears to affect the stomach similarly to the other mineral acids—increasing the appetite, aiding digestion, and acting as a general tonic—therefore having a wide range of applicability. Bromine is known to be a powerful antiseptic, and its hydrogen acid, combined with quinia, connot be too much extolled in septicæmia. The acid is a powerful refrigerant and sedative, administered with syrup in fevers, with which, among other combinations, may be made the bromide of mercury as an alterative. In fact, the acid alone is a powerful alterative."

Dr. Wade employs this formula for the preparation:

℞ Bromide of potassium. ....120 grs.
Crystallized tartaric acid.....153 grs.
Water..... ....one fluid ounce.

Mix, and agitate until the potassium salt and the acid are dissolved and the precipitation commenced. Set aside in cold water twelve hours and decant. One part of the bitartrate of potassium that forms is soluble in one hundred and eighty parts of water, so that the result is not strictly pure acid, but for therapeutical purposes it is sufficiently so. In this formula each fluid drachm contains ten grains of bromine. The usual dose is a half drachm, although there is no reason why the amount might not be safely much exceeded.—*Detroit Med. Journal*, May, 1877.

Dr. J. Marion Sims will sail for Paris on May 19th instead of the 12th instant, as announced in our April issue, and will remain in Paris until about November 1st, 1877, when he will return to New York to resume practice in that city.

Dr W. A. B. Morcom, of Edenton, N. C., has accepted the invitation to deliver the Albumi Oration at the University of Pennsylvania at the Anniversery Celebration in March, 1878.

The Dental Association of Maryland and District of Columbia will convene at Deer Park, Maryland, on Tuesday, August 14. The American Dental Convention and the Southern Dental Association will unite in the meeting. Dr. John J. Caldwell, of Baltimore, is Chairman of the section to report on Anæsthetics. He wishes to get from physicians any observations or suggestions they may be willing to communicate regarding the history, nature, uses, abuses, dangers, antidotes, &c., of anæsthetics—nitrous oxide gas in particular. A number of other prominent medical gentlemen, besides Dr. Caldwell, have been invited to take part in the proceedings; and to several have been assigned special subjects for report. The special efforts being put forward by the Committee of Arrangements to make the session one of unusual interest and profit must result in good. The fact, also, that Deer Park itself is a favorite summer resort, will induce some to attend who would otherwise probably not find it convenient to be present.

The Maryland Medical Journal, Drs. H. E. T. Manning and T. A. Ashby, editors, Baltimore. This first number (May, 1877) is received. It is a handsome journal, contains 36 pages, price $3.00 a year. It contains original papers from Drs. Chisolm, Coskery, Arnold and Brown—all prominent medical writers, whose contributions will give tone to any journal. We are promised that the size of the journal will be increased as circumstances may seem to justify. We most heartily commend the enterprize, and hope it will meet with a liberal support.

United States Dispensatory.—A new edition has just been issued from the press of Messrs. J. B. Lippincott & Co., Philadelphia. Dr. Geo. B. Wood has revised part first, and Dr. H. C. Wood the remainder, aided by Prof. Bridges.

The Tennessee State Board of Health was organized, in accordance with a recent Legislative enactment, on Tuesday, April 4th, 1877, in Nashville. The Board is composed of five physicians appointed by the Governor. Dr. J. D. Plunket was elected President. The election of a permanent Secretary was postponed for a year; but Dr. J. D. Lindsley, of Nashville, was appointed Secretary *pro tem.*

The North Carolina Medical Society will convene in Salem *Tuesday*, May 22d, *Dr. A. G. Carr*, of Durham, is Treasurer. A most important element of success of any organization consists in keeping the treasury in a healthy condition.

The Medical Society of West Virginia.—The tenth annual session will be convened in Clarksburg at 2 P. M., May 30th. It will be an important meeting.

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RICHMOND, JUNE, 1877.

Original Communications.

ART. I.—*Useful Prescriptions.* By J. LEWIS SMITH, M. D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, etc., New York, N. Y.

Several years ago, Dr. Horace Green, then having withdrawn from general practice, and devoting his attention to the specialty with which his name was associated in this country and in Europe, contributed to one of the New York medical journals a series of papers bearing some such title as the above. To me, then embarking in the profession, these papers seemed very valuable, and I copied from them prescriptions which, more or less modified, I have continued to use with good results till the present time.

It has been said, that, if the diagnosis is clear, the physician, if he have the knowledge which he should possess of the therapeutic effects and doses of the articles in the materia medica, knows at once what to prescribe; but, according to my experience, it requires years of practice to enable the physician to prescribe with the best selection and the best combination of medicines, in a large proportion of the cases which he is called upon to treat. Having these views, and thinking to aid the younger members of the profession, I am induced to send, for publication, the following prescriptions, all of which have been sufficiently employed, either in family practice or in the institutions of New York, with which I have an official connection, to enable me to recommend them with confidence in their efficiency.

Indigestion.—Indigestion, though often accompanied by an unpleasant sensation of fulness or weight in the epigastrium, by heart-burn, water-brash, eructations of gas, etc., commonly has no serious anatomical cause, and results from functional derangements which are easily rectified if the proper remedies are employed. But, from difficulties attending the examination of the stomach, the exact pathological state in most cases of indigestion cannot be readily ascertained; so that physicians are compelled to prescribe without that full and clear diagnosis, which they are able to make in most other diseases.

The following treatment has, in my practice, probably relieved nine-tenths of those cases of dyspepsia, which were not due to organic disease:

℞. Bismuthi subcarbonatis.....ℨij.
Pepsini (vel Lactopeptini.).....ℨiss. Misce.

Divide in crustulas, No. xij. Signe:—Take one wafer before each meal, and twenty drops of the following in wine or water after each meal:

℞. Tincturæ nucis vomicæ,
Acidi muriatic; (dilut.).....aa ℨj. Misce.

In cases attended by constipation and eructation of gas, the following will be found useful:

℞. Pulveris carbon. ligni,
Magnes. calcinat.....aa ℨj.
Pulveris rhei.....ℨij. ad ℨss. Misce.

S. Take half a teaspoonful to one teaspoonful in simple syrup or any convenient vehicle, three times daily. Of course, whatever the medicines employed, proper directions should be given in regard to the diet of dyspeptics.

Constipation.—In habitual constipation of the adult, in which the use of fruits and the most laxative articles of food often has little effect in producing evacuations, the following pill will be found very efficient, while its purgative effect is not severe, and is commonly without pain:

℞. Ext. belladonnæ.....gr. iij.
Ext. nucis vomic.....gr. vj.
Podophyllin.....gr. vj—ix.
Ext. aloes.....gr. xviij. Misce.

Divide in pilulas No. xviij. S. Take one when required.

The habitual constipation of infants is a common and troublesome complaint. It can sometimes be remedied when a wet

nurse is employed, by the change from one nurse to another, and often by giving a little oatmeal one or more times daily. It is better to employ enemata of water, or water with sweet oil and molasses for habitual use, than to employ even the mildest preparations of those purgative drugs which are in ordinary use, and which produce catharsis by their stimulating or irritating effect upon the surface of the intestines, since the irritation which they cause is apt to impair the function of the gastro-intestinal mucous membrane; or the intestines may become so accustomed to them, that it will be found necessary to increase the dose in order to obtain the desired result.

The treatment which I am at present employing for a decidedly strumous child, aged 4 years, in the New York Foundling Asylum, indicates the manner in which, in my opinion, the habitual constipation of young children can be best overcome. When I commenced attending in this institution in May of the present year, I was informed that this child, who had scrofulous inflammation of one of the joints, and a greatly enlarged and pendulous abdomen, from a lack of tonicity and action in the muscular fibres, seldom had a stool without the use of a cathartic or a clyster. The circumference of the body, measured over the umbilicus, was twenty-three inches, and the abdomen was soft and painless on pressure. The following prescription was ordered:

℞. Syr. calcis lactophosphat.....1 part.
Olei morrhuæ .....2 parts. Misce.

S. Give two teaspoonfuls three times daily. Rub the entire abdominal surface three times daily with cod liver oil, making the inunction gently but firmly with the extended fingers.

From the day on which this treatment was commenced the abdominal protuberance began to subside, and stools have occurred regularly without further aid. In the ordinary habitual constipation of young children, I think that the muscular coat of the intestines needs stimulating to produce more active peristaltic, and vermicular movements, and I know no safer and better way to produce this than by kneading and rubbing, just as we make the uterine fibres contract in parturient women. It insures more thorough manipulation if the nurse is directed to apply some kind of oil or other medicament.

Having on different occasions noticed a laxative effect from the syrup of the lactophosphate of lime and cod liver oil, either given in the proportion stated above, or half and half, employed to improve the general nutrition, in the treatment of the diathetic diseases, I now usually order the two in a mixture, to be given three times daily in connection with the rubbing, for the habitual constipation of children. The syrup of the lactophosphate of lime is not officinal, unless recently, but it is found in the shops, each drachm containing two grains of the salt. It is pleasant to the taste, being a little tart, from the presence of free lactic acid, and, I am informed also, of dilute muriatic acid, which is added to insure better preservation. If a more active laxative is occasionally required, I prefer the following:

℞. Sodæ phosphatis ..... ℥j.
Syr. calcis lactophosphatis ..... ℥iiss. Misce.

Give one teaspoonful, more or less, according to the age, as often as may be required. The two phosphatic salts, if properly prepared, dissolve without precipitation, and form a mixture, which is readily taken by the patient.

Infantile Diarrhœa.—The hot season is approaching, during which the diarrhœa of infants is the most common and fatal malady of the cities. It is very important, in order to its successful treatment, that its cause be removed so far as possible; for by the continued operation of the cause, the diarrhœa is obviously more stubborn and persistent. Therefore, proper directions should be given in reference to the hygienic management of the patients, and especially as concerns the diet.

The treatment of this disease by small doses of calomel, combined with Dover's powder, has been very generally and properly discarded in New York. The more intelligent physicians prescribe opium and bismuth, with or without pepsine or lactopeptine, and sometimes in combination with chalk. The following prescriptions have been largely and successfully employed in the New York Infant Asylum, and in private practice:

℞. Tinct. opii ..... gtt. xvj.
Bismuth. subnitrat ..... ℥ij.
Syr. simplic ..... ℥ss.
Mistur. cretæ ..... ℥iss. Misce.

Give one teaspoonful every three hours to a child of one year.

℞. Tinct. opii..... ... . gtt. xvj.
Bismuth. subnitrat..... .....ʒij.
Pepsini (vel Lactopeptini)....ʒiss.
Syr. zingiberis,
Aq. menth peperit..... aa ʒi.

To be administered in the same dose as the foregoing. In severe cases the dose may be given for a time every two or two and a half hours.

Vomiting is often a prominent symptom in this malady. It sometimes commences before the diarrhœa, and often continues after the latter ceases. It may be controlled by the above prescriptions, and often, also, by lime water given in an equal quantity of milk, to which, double or treble as many drops of Bourbon whisky or brandy are added as the infant is months old. A few drops of chloroform, in cold water, will also sometimes control the vomiting. Carbolic acid, given in doses of $\frac{1}{10}$th to $\frac{1}{6}$th of a drop has been recommended by writers for the nausea, but I have not observed any decided benefit from its use in the majority of instances in which I have had an opportunity to witness its effects. But there is another remedy which I can recommend, which is seldom used for this purpose, and the dose of which is so small, that most physicians will probably think it inert, namely: $\frac{1}{10}$th to $\frac{1}{6}$th of a drop of tincture of ipecacuanha, given to the infant in a teaspoonful of cold water, every hour or second hour, till the nausea ceases. The reports of its use in two of the institutions of New York have been favorable. A physician of New York, exact in his observations, and cautious in his statements, has informed me that he recently relieved vomiting in an adult, when other remedies had failed, by one drop doses of the same medicine.

The "summer complaint" of infants is, in most instances, an entero-colitis, the inflammatory lesions being especially marked in the descending colon, while the gastric mucous surface, even in those cases in which nausea is a prominent symptom, usually shows no anatomical change apparent to the naked eye. In certain cases, in which the diarrhœa is not sufficiently controlled by medicines administered by the mouth, injections of $\frac{1}{10}$ to $\frac{1}{8}$th

of a grain of nitrate of silver in each ounce of mucilage, will be found useful.

Uses of Cinchona and Quinine.—There are few articles in the materia medica which physicians would part with more reluctantly than quinine, and of late years its use has largely increased. It is not only given in more diseases than formerly, but in greater doses. It is now prescribed as an apyretic, in many of those maladies in which veratrum viride and aconite were formerly employed, since, while in large doses it reduces the pulse and temperature, it does not depress like those agents. It is now commonly prescribed in this city (New York) in severe pneumonia, child-bed fever, etc., so that from twenty to forty or fifty grains are given, in twenty-four hours, in five to fifteen grain doses, taking the place of the depressing apyretics formerly used, and apparently aiding materially in arresting the disease. This increased demand increases the price of the drug, so that the poor often feel the expense of it too burdensome, if the sickness be of considerable duration. If the price is still farther advanced, quinine will be placed beyond the reach of many families, except in diseases of short duration. Therefore, it seems to me, the duty of physicians to prescribe other and cheaper medicines when they will answer nearly or quite as well, reserving the quinine for graver cases, and cases in which no adequate substitute can be prescribed. In some of the New York hospitals and dispensaries sulphate of cinchonia is dispensed in place of quinine, being given in the same manner and in doses one-third larger. It has been found an efficient substitute for quinine in the treatment of malarial diseases, neuralgias, etc.

Twenty years ago, when I was one of the physicians to the Northwestern Dispensary, the apothecary introduced a mixture, which the whole medical board prescribed, and which seemed to us preferable, in many cases, to quinine, while it was less unpleasant to the taste, and was comparatively inexpensive. Of late years I recognize the same medicine as a popular nostrum, having the name, "Indian cholagogue." It will be seen from its composition, and experience shows, that it is an efficient substitute for quinine, as a tonic and in the treatment of malarial and neuralgic diseases. By adding a teaspoonful of it to a certain num-

ber of teaspoonfuls of water, it can be readily administered to young children.

℞. Quiniæ sulphat..... ℥ij.
Pulv. cinchonæ ..... ℥iv.
Tinct. sanguinar. sat..... ℥iv.
Syr. simplic ..... ⊙j.
Strychniæ ..... gr. iij.
Acid sulphur. aromat. ..... ℥ij.
Spts. vini..... ℥ij.
Aq. puræ..... ℥ij.
Ol. gaulther.
Ol. menth. piperit.. ..... aa ℥j. Misce.

One difficulty in the employment of the sulphate of quinia and cinchonia, is their extreme bitterness. This property sometimes prevents the proper employment of these salts, especially for children. No vehicle with which I am acquainted, so well conceals their bitterness, without impairing their efficacy, as the following, which is prepared by one of the leading pharmaceutical firms of New York, who have given it the name elixir adjuvans. The sulphate, whether of quinia or cinchonia, is suspended in it, no acid being employed. I have obtained, indirectly from one of the firm, the formula for this elixir.

℞. Cort. aurant..... .....℥ij.
Pulv. semin. coriand.,
Pulv. semin. carui..... aa ℥j.
Pulv. cort. pruni Virginian ..... ℥iv.
Pulv. radicis glycyrrhiz..... ℥vj.
Menstrum:—Alcohol.. ....part j.
Aquæ..... ....parts iiss.
Percolat..... .....five pints.
Adde:—Syr. simplic.,
Aquæ..... aa O iiss.

Three grains of the sulphate or under, may be prescribed in each teaspoonful of this elixir, and five grains in each desertspoonful.

227 *West 49th Street.*

Art. II.—*Hay Fever.* By Thomas B. Evans, M. D., Baltimore, Md.

The subject of hay fever is, to me, always one of interest, although not one of enjoyment. Being myself a victim of the disease, and since my earliest recollection having had to undergo

yearly the fiery ordeal of an attack, with all its concomitant ills, I feel that I can speak *ex cathedra*, and *exempli gratia* exhibit myself as one versed in all the sufferings that attend its onset.

History.—Hay fever appears to be a disease of this century—at least we have nothing in the literature of medicine to lead us to believe that it was recognized as such prior to the year 1819. It was brought forward in that year by Dr. Bostock in a paper presented to the London Medical and Chirurgical Society, under the title of *A Case of a Periodical Affection of the Eyes and Chest.* The doctor was a victim of the disease, and described his own case. Nine years afterwards, before the same Society, he presented another paper upon the same subject—the result of observations made and conclusions formed from an enlarged experience. He then gave a name to the disease, styling it catarrhus æstivus or summer catarrh. Subsequently it was called Bostock's catarrh, hay fever, rose cold, hay asthma, autumnal catarrh, peach cold, pollen catarrh, pollen asthma, etc. More recently, numerous works have been written upon the subject, and extended experiments by men of ripe culture and large experience have been made, notable among whom are Dr. Blackley, of England, and Drs. Wyman and Beard, of this country; and yet there still remains a vast deal to be learned respecting it.

There is one feature in the history of this disease that cannot be applied to any other that I am aware of. That is, an Association has been organized for the purpose of mutual benefit and for seeking information which shall serve to relieve all sufferers with hay fever wherever found. The members of the Association are composed of hay fever sufferers; any person that suffers with it can become a member. Every member is required by the Constitution to report to the Secretary the discovery of any new remedy, source of relief, or exempt district which may come to his knowledge. The annual meetings of the Association are held at Bethlehem, White Mountains, in the State of New Hampshire, on the last Monday of August in each year. This place has been selected for the meetings because the White Mountains are believed to be the best resort for the sufferers, at least, immunity from the disease is there experienced by those who stay in that locality during the summer months.

Etiology.—In the consideration of the etiology of hay fever,

we are met with a thousand and one *opinions* at the outset. Dr. Beard, in his late work upon *Hay Fever*, gives statistics of two hundred cases that illustrate this point, but I will not attempt an enumeration of these views. From the fact that the disease occurs only in early summer, midsummer, and sometimes in the latter part of summer, there naturally arises the conclusion that heat is an essential factor in the causation, and that there is developed during the heated term some agent that produces, in certain individuals, the disease under consideration. In my case, the first symptom is experienced in the month of June. I can be found on the 15th day of June sneezing with a vim that is wonderful—carrying with me a half dozen handkerchiefs wet with tears. My daughter, who is also a sufferer, has an attack always on the 19th day of August. I have never known it to miss coming on that day in her case; neither does it fail me on the 15th June.

The regularity with which these annual visitations appear, is somewhat singular. In the two hundred cases collated by Dr. Beard, there were but thirty-six that noted a recurrence upon the same day, while the others stated there was no regularity as to day, but that it was sure to appear either during the fore, middle or latter part of the summer.

The pollen of different flowers and grasses produce the disease. Some persons claim that they are attacked whenever they approach a heap of freshly mown hay, a meadow in full bloom, or a field of grass. Dr. Blackley, of London, in a series of experiments made with the pollen from seventy-four different plants, succeeded in producing the disease in all its intensity, by simply placing the pollen upon the mucous membranes of the nose and mouth. The characteristic symptoms were established in a few hours. Dust of any kind, cinders, smoke, sunlight, gaslight, over-exertion, foul air, indigestion, fruits, peaches, pears, melons, tomatoes, anxiety, and a large number of other irritants, are named by authors as potent causative factors.

Females, as a rule, are less liable to the disease than males. The ratio is about 104 males to 50 females.

It is a singular fact, in connection, also, with this disease, that its victims are drawn from the educated classes; it is a very aristocratic disorder. It is a disease of the brain workers, and

not muscle workers. The number of physicians affected is relatively much larger than those of any other class of men. Clergymen and lawyers follow in succession. Farmers are the least of any class.

The law of heredity also applies. In far the larger number of cases, investigation proves they have only suffered what their ancestors did before them.

This law of heredity goes to prove—at least, it is strong evidence in favor of the proposition that hay fever is a nervous disorder, and is to be classed as a neurosis. Upon no other ground, we think, can so strong a position be found and so well defended.

The theory that the pollen of flowers and grasses is a potent factor in causing the disease, although maintained by many, will not bear a very close investigation, without throwing some doubt upon its truth. In this country the larger number of cases occur in the latter part of the summer, when the pollen is not half so abundant as it is in the earlier part of this season. In England the disease abounds, for the most part, in the spring months, when the pollen is supposed to be most vigorous. In France and Germany it is very rarely seen. Pollen must, of necessity, be more abundant in the country than in the city; and yet hay fever is a disease of the city. Not many sufferers are to be found among our farmers, where, if pollen be the cause of the disease, we would naturally expect to find a large number of cases. Still it must be said to the credit of the pollen theory, that a hay fever sufferer will be relieved in a few hours by riding the blue billows of the ocean; a sea voyage brings immunity, from the fact that there are no pollen in the air. Again, it has been noticed by persons who stay near the sea shore as a means of relief—a custom that is followed in England—that when the sea wind blows they experience great relief. But as soon as the wind changes and the land wind blows, these very parties are in the midst of trouble—the land wind being filled with the pollen, and the wind from the sea being, of course, free from it.

High, elevated regions are also free of the disease, owing to the fact that it is supposed that pollen does not rise above a certain altitude. An elevation of 1,200 or 1,500 feet above the level of the sea being above the pollen zone, must, and does bring exemption.

Dust is my particular aversion, and all hay fever sufferers will, I know, say *Amen*. It produces the most intense suffering, and the sweeping of a room will bring on an attack very often in some persons.

While there can be no question as to the irritating properties of pollen, dust, etc., and that the disease is very much aggravated thereby, yet, from the large number of special causes enumerated, we are led to conclude that many grave errors have been made in citing some things as *causes*, which should properly have been called simply *excitants*, or agents of irritation to an already diseased condition. There must be something more than these irritants to produce hay fever. Thousands of individuals are exposed during the summer months to these same excitants, yet no symptom of hay fever develops. Why should hay fever be a disease peculiar to the educated class? Among the poor and laboring classes the disease is rarely seen, although they are certainly more exposed to the action of those agents that are supposed to cause it than their more favored brethren. And yet, in your dispensaries, where are to be seen every form and phase of disease, you never see hay fever. Of 154 cases collected by Dr. Phoebus, 146 were educated; 8 uneducated persons.

I do not claim that hay fever has any special claim to men of genius. Says Dr. Beard—and the statement is true—it is "a disease of the fashionable and thoughtful, the price of wealth and culture, a part of the penalty of a fine organization and an indoor life. Sufferers have derived an immense amount of consolation from this, and point to Daniel Webster, Southey, Chief Justice Shaw, Helmholtz, Henry Ward Beecher, and a host of other names, illustrious in science, in art, in law, in statesmanship and in literature, with some degree of pride, and rejoice that they are in good company." The reason why it prevails among this class of individuals, is because the nervous diathesis or temperament is peculiar to them, while their modes of living, habits and pursuits in life are of such a nature as to render them much more liable to the influence of anything calculated to depress the nervous system than is the case in that class who make use of their muscles rather than of their brains.

Symptomatology.—Upon the approach of warm weather more or less sensitiveness is always exhibited. The patient expe-

riences a feeling of langour and depression. The slightest exertion produces free perspiration. In all victims whom I have seen, I have noted this fact: the liability to sweat freely, which, during the heat of summer, constitutes one of the most unpleasant symptoms. This period may be called the prodromal stage of the disease. It may last for two or three weeks; in some cases it may be even of longer duration; but in these individuals it may not extend beyond a day or two. Cases occur in which the patient does not suffer any apparent prodromata. Daniel Webster said of his own case: "It may come like a thief in the night, or it may be as bold as a lion." Dr. Phoebus mentions the case of a patient who had an attack of sneezing and other hay fever symptoms "while looking at a beautiful picture of a hay field." In my own case, the first prominent symptom is an itching sensation in the fauces; from that point the irritation extends down the larynx and upward and forward to the nose, and also to the eyes. The desire to rub and scratch the part is uncontrollable. The throat, eyes, nose and Eustachian tube itch—feels as if the devil had a straw in them titillating the parts to his intense satisfaction. In other cases the itching is first felt in only one of the parts I have just mentioned. The eyes have a feeling as if sand were in them. The next prominent symptom is sneezing. And here let me say, *en passant*, that there is no sneeze like a hay fever sneeze—loud, persistent, sonorous; it is a sneeze *sui generis*—tall, commanding, inflexible, excessive, odious, detestable; it is a sneeze that makes everything around sneeze. Beecher says, "there is a riot of sneezes. First a single one, like a leader in a flock of sheep, bolts over, and then, in spite of all you can do, the whole flock, fifty by count, come dashing over in twos, in fives, in bunches of fifty." This sneezing is followed by profuse lachrymation. The eyes weep so abundantly that the overflow of tears passes through the nose—veritable tears. The handkerchief becomes a source of study, a banner of grief, a diaper of woe. In the course of the disease, the character of the secretion changes, and becomes more like that of catarrh—thicker and not so clear. The irritation causing the foregoing symptoms soon leads to positive inflammation of the mucous membranes of the nose, eyes and pharynx. The sense of smell is obliterated; photophobia is ex-

perienced, and cough and asthma follow. Many suffer with pain in the head, and a sense of chilliness. The pulse is full and frequent; the skin hot and dry. Fully four-fifths of those who suffer with hay fever have cough and asthma; but there are others who have all the symptoms above enumerated excepting the asthma. I have had but two attacks of asthma in my life, but have never missed the fever. Some years in my case the attack of hay fever has been slight, and I have been led to believe that the remedy I had been using was of decided benefit; but in the next year I would find that I was deluded, and that hay fever was no mean foe. Last summer I had it lightly, and this winter made up for my exemption in having rheumatic gout. And here I would state that this has been the third time in my life that this circumstance has occurred. If I have hay fever lightly, I am sure to have rheumatic gout afterward. Professor E. Lloyd Howard, M. D., of this city, in a letter to me states that his father and brothers all suffered with hay fever, and that he noticed for a number of years that when (as they sometimes had) gout, they did not suffer with hay fever, and when they had hay fever regularly every year they were free from gout entirely. He also noted the same thing as occurring in several families residing near his father's residence. Those that had gout had no hay fever, and *vice versa*.

For convenience of description you may divide the stages of hay fever into the premonitory, catarrhal, bronchial and spasmodic. But how long each stage may last before it passes into the other, is difficult to state. I do not think there is any regularity about the length of any of them. The duration of each stage depends very much upon the kind of weather. Sudden changes of temperature may cause the spasmodic stage to appear in the onset along with the catarrhal; and I have known persons to remain in the second stage of the disease six weeks before it would assume the spasmodic or asthmatic. In the midst of intense suffering, a shower of rain sufficient to cool the air gives the greatest relief. The more intense the heat, coupled with a dry atmosphere, the more violent will be the attack. In consequence of the moist condition of the atmosphere in this city last summer, although the weather was extremely warm, hay fever sufferers did not have as much annoyance as is common during the heated term.

Diagnosis.—The diagnosis is not difficult. The only diseases with which hay fever can be confounded are asthma, acute bronchitis and coryza. Its periodical character would be sufficient to distinguish it from a common cold. The character of the sneezing, as I have mentioned before, can be likened to nothing in this world. Hay fever is relieved by a change to mountain air, whereas an ordinary cold might be aggravated thereby. Dust, smoke, cinders, etc., do not make a cold worse, but they play riot with hay fever. In bronchitis there is more constant fever, mucous râles, no itching of the eyes, nose, etc. In asthma, proper, we have no nasal symptoms as we have in hay fever, and there is no periodicity about it.

Prognosis.—Hay fever is not inconsistent with longevity. It is an heirloom that will be ever at your side, do what you will. You will suffer yearly, unless you can afford to live in mountain air during the hot weather of summer. As a general fact, hay fever patients are long lived; the only danger appears to be the liability to incur an annual visitation of a most distressing character.

Treatment.—The old adage that an ounce of prevention is worth a pound of cure, is fully exemplified in regard to hay fever. You may readily prevent it, and relieve it when established by proper medical treatment; but you will not be able to permanently cure it. Henry Ward Beecher once asked the celebrated Dr. Oliver Wendell Holmes for a remedy for hay fever. The doctor replied, that "gravel was the most effectual cure; it should be taken eight feet deep." A sea voyage will give immunity; and a residence, during the catarrhal season, in some elevated, cool mountainous region. We have in our own State a place called Oakland, situated upon the Alleghany Mountains; also Deer Park, six miles from Oakland, in the same Mountains, that gives positive exemption. I could name fifty persons that have obtained immunity there for many years; and the reputation acquired from this fact has made it an objective point for all hay fever sufferers in this State and the surrounding country. I am very sure that most cases will find all there that is needed to make them comfortable; fine, bracing air, cool and pleasant at all times; two hotels and several cottages that cannot be surpassed for their ability in providing for the

comfort of guests. White Mountains, Bethlehem, Glen and Twin Mountain House region, the Adirondacks, Rocky Mountains, Catskill, Denver in Colorado, all have acquired a reputation as a sure resort for hay fever patients. Cool regions without regard to elevation all give immunity. In short, any region where there are no violent extremes of heat or cold, but where the temperature is equable will afford relief. I have no doubt but that there will be found very few cases of hay fever in such places.

The treatment for the disease when fully established, may be both constitutional and local: Tonics to fortify and strengthen, sedatives to allay irritation, and narcotics to procure sleep, are all required in most cases. Quinine is the remedy par excellence, given internally and used locally. Tincture of muriate of iron, phosphorus, strychnia, belladonna and arsenic have been used also with success. The best remedy to induce sleep is chloral combined with bromide of potassium. Local applications to the mucous surfaces may be made with an atomizer or the nasal douche. Common salt, tannic and carbolic acids, camphor, glycerin and iodine have been used in this way with varying relief. Many other things have been used, but I deem it not advisable to mention more of them, as it would consume too much time, and, in the end, impart nothing of value. Relief will almost always be given by the remedies I have mentioned.

But before concluding I wish to repeat the statement as the result of my own experience, that there is no agent so powerful for good as quinine, given in two grain doses three times a day and continued for several weeks.

ART. III.—*The Origin and Communication of Typhoid Fever and Cholera.* By JOHN C. PETERS, M. D., President of the Medical Society of the County of New York, etc., New York, N. Y.

I have been very much pleased with the article of Dr. Wm. H. Bramblett in the May number (1877) of the *Medical Monthly*, on the *Etiology of Typhoid Fever*, and will pass in review some of the information which we have on the subject, as it is fraught with interest about the communication of many other diseases, especially dysentery, cholera, erysipelas, diphtheria, etc.

Many diseases, like the above, are communicable without being always contagious in the ordinary sense of the term. That

dysentery, Asiatic cholera and typhoid fever are not unconditionally contagious, is not proven; but that they are often very communicable does not admit of a doubt. True typhus fever is very contagious, but typhoid fever is very moderately so. During twenty-three years, viz.: from 1848 to 1870, 5,088 cases of typhoid fever were admitted into the London Fever Hospital, but only 17 residents in the building contracted the disease, and 12 of these were traced to serious derangements of the drainage. Since 1861, according to Murchison, the patients suffering from typhoid fever have been treated in the same wards with persons sick of other diseases; so that during nine years, 3,555 cases of this fever have been treated in the same rooms with 5,144 other patients. Not one, says Murchison, has contracted typhoid fever.

The majority of cases of typhoid fever have an independent origin from decomposing filth accumulated in obstructed drains. This filth need not be fæcal filth, although it too often is; for there is every reason to believe that kitchen filth, scraps and slops, delayed in obstructed drains, may cause typhoid fever. Free exposure to the atmosphere, or constant dilution in a running stream, may not only render the poison inoperative, but prevent its formation. Hence, open out-door privies do not generate the virus, but leakage from them, getting down under houses, especially if it finds its way into obstructed kitchen or other underground drains or channels, will almost certainly cause the disease. An offensive out-door privy is not so dangerous as a badly appointed drain within. The disease is bred in darkness; the decomposing matter must be in a confined space, in a state of stagnation, and without free access of air. If the poison thus generated should finally find its way into a cistern or well, then the results will be truly disastrous to almost all who partake of the drinking water. I think the exceptions to these rules will be few indeed.

Murchison has seen many cases, and I have seen some, in which typhoid fever has broken out in an isolated country house, or in a small group of houses, miles away from where any fever has been prevailing, and in which every mode of importation seemed impossible. But, I have always been able to discover an obstructed drain in or under the house, or near it, and gene-

rally with fæcal filth in it, but sometimes without this dangerous addition. Sometimes the poison was imported, but in a large proportion of instances, no importation could be traced; and I agree with Murchison, that when typhoid fever is imported, it does not spread, unless there be at the same time defects in drainage or in the water supply. When typhoid fever is imported into a house, then, as in dysentery or cholera, the alvine dejections appear to constitute the chief, if not the sole medium of communication. The fresh evacuations, however offensive, are harmless; also, if thrown into an open out-door privy, or upon the open ground, unless they find their way into some underground obstructed channel or drain, and there putrefy—the only or principal outlet for their vapors being into some badly ventilated place, like a crowded or stiffling house, which is closed at night.

No examination into the origin of typhoid fever can be considered complete unless the cellars of the houses and the underground soil have been carefully examined; every drain or channel under them has been traced out; the leakage and soakage from the kitchen has been tracked down, and the course of water used in washing clothes, kitchen utensils, chamber vessels, &c., which may have been thrown out of doors, has been shown not to run back into or under the cellar. The drainage from garbage thrown out of doors, or deposited in barrels or boxes near the house must be followed up in the same way. With these precautions, the source of the origin of typhoid fever in country houses will generally be discovered. I trust that Dr. Bramblett will review his exceedingly interesting cases and supply us with his further reflections upon them, and any others which may fall under his observation; for it is but rare that medical intelligence is conveyed so clearly and with so much fairness and acumen.

I am far from denying that typhoid fever is not occasionally contagious, just as dysentery and erysipelas are; but this is the exception and not the rule, and some obstructed drain or other local cause is frequently overlooked. Fomites occasionally excite typhoid fever; for as the stools of typhoid fever patients may putrefy and become poisonous in a drain, or drinking water, there is no reason, as Murchison says, why similar changes should not take place in the excrement discharged into clothes

or bedding, which have been tucked or stowed away without careful washing; or why these articles should not in this way come to propagate the disease.

The conveyance of typhoid fever is sometimes more hidden than is manifest upon the surface, but ambulating cases which go about apparently well, until sudden perforation of the bowel takes place, are not very uncommon; and the number of these cases in which no perforation takes place, and thus entirely escape observation, may be very great.

To return to the subject of contagion, it is probable that in cases 1, 2 and 3 of Dr. Bramblett's series there was some local defect in the house, and that No. 3 contracted the disease from the locality, and not from the patients. The same is probably true of cases 4, 5, 6, 7 and 8, as all the members of the family, except those that had previously suffered, were attacked. As the water supply and privy were far removed from the house in safe positions, the cellar, kitchen or immediate surroundings of the house may have been at fault. Case 9 may have contracted the disease from the L. house, and not from the patients he helped to nurse; and his house and its surroundings must have been in better condition, or more than 3 out of the 9 inmates would have suffered. The same train of argument applies to cases 11 and 12; and still more forcibly to case 13 (Joseph S.), who did not go into the M. house, but merely passed frequently in front of the door. The S. house must have been in better condition as regards drainage under and near the building, and more cleanly in its immediate surroundings, or else more than 1 out 8 of its inmates would have been attacked. Case 14 is a little more difficult to explain; but if the sleeping apartment of Mary B. was on the ground floor, or subject to emanations from the cellar or kitchen, or some obstructed drain, she alone would have suffered. Case 16 is still more difficult to elucidate. The nuisance could not have been in the house, or his wife also would, probably, have been attacked. The case was not a very contagious one, as it lasted 66 days, and his wife escaped; perhaps he may have been engaged in opening up some obstructed drain, at some little distance from his residence. Case 17 cannot be commented upon to advantage, and I can throw out no suggestions about it.

I am sure that Dr. Bramblett is so earnest a student of science that he will not object to these conjectures. His cases are too important to allow of any reasonable doubts about their origin. They may be divided in two classes; 1st. Those in which the personal contagion was absent, slight, and doubtful, as in case 18, in which 3 out of 4 escaped; case 15, in which 6 out of 7 remained well; case 14, in which also 6 out of 7 remained immune; and case 13, in which 7 out of 8 were unattacked. In the 2d class, the contagion from persons, or more probably the infection from the locality, was so positive that both cannot be ignored. But as the direct personal contagion of typhoid fever is so doubtful, and that of localities is so well proven, especially when decomposing sewage has been found in obstructed underground drains or channels, the former cannot be admitted unless all possible infection from the latter has been most carefully disproven and eliminated. In Dr. Bramblett's cases, water-poisoning and infection from out-door privies seem fairly excluded; but leakage into cellars, and obstruction of subcellar drains and channels have not been as fully considered as some may consider desirable, although a general denial has been put in.

I have made many examinations, with the aid of experts, of most excellent houses, inhabited by wealthy and very careful people, who were wide awake to every possible defect, and have almost always succeeded in detecting the probable source of typhoid fever, diphtheria and other cognate affections. I recollect one house that was put in order three times from roof to cellar, without checking the infection which was finally found in a subcellar drain. Not long ago, I nearly lost my life, and suffered for three months with typho-malarial fever after one of these investigations, and discovered defects, to my own sad cost, which had escaped the observation of one of our best sanitarians.

I think that typhoid fever is generated in this country, very much as cholera is in India. Both arise from decomposing filth, especially fæcal filth. The fresh discharges are not poisonous, but if they get into damp spots or drains in houses, they become very infective, and if they gain access to drinking water they cause wide-spread epidemics. We know that if bread, fruit, plates, cups, glasses, etc., are manipulated by persons whose

hands are soiled by even the odorless rice water cholera discharges, that those, especially children, who eat of or from these contaminated articles will generally suffer, or die. The same may be true of typhoid fever. I suppose that vegetables, handled in the same careless way, unless cooked in very hot water, will also convey the disease. In houses in which the wife and mother also act as cook, the danger is particularly great. It has happened again and again that parents and others with choleraic diarrhœa have thus, as it were, wiped off their soiled hands on the bread and other food which they have prepared for their children or friends and thus poisoned them. In Chattanooga in 1873, the first death from cholera was a little boy who had been sick in bed with measles and pneumonia for eight or ten days. His mother kept a boarding house frequented by railroad employees from Nashville, then direly stricken with cholera. Some of these men, already affected with choleraic diarrhœa, visited the little boy, brought him cake, apples and toys, and conveyed the disease to him. The very weak died first, but two of these men died in the same house two days afterwards. In hospitals and prisons, old debilitated and even stronger inmates often die of cholera before those who introduced the disease succumb. In the Bavarian Prison at Laufen, many convicts were received from Munich where cholera prevailed. Some of them used a privy which overflowed into a cellar in which potatoes were stored. Twelve old, decrepid men were employed as potato-peelers, and some of them slept in the third story rooms, far distant from the cellar. Cholera broke out in these rooms, and the potato-peelers were among the first victims. The tubs and pails which were used at night in these rooms as urinals and chamber pots were washed near the well which supplied the prison with drinking water. A tremendous outbreak occurred with 191 cases and 83 deaths from cholera. An overseer who lived in the town of Laufen went home sick with the cholera and died. His nurse who tended him, and washed his bed and body clothes, and his close stool, returned to her distant home whith choleraic diarrhœa. Her two children for whom she doubtless cut bread and prepared other food, died first, and she succumbed only two days afterwards. Such occurrences amazed Pettenkofer, who was looking for the influence of sub-soil water in the third story

rooms, and could not understand why the old inmates of the prison died before the new comers; nor why the children of the nurse died before their mother, who brought the disease to them. It is not uncommon in hospitals and prisons for decrepid subjects to die of cholera before the rice water discharges make their appearance; but at the post mortem examination they will be found in the small bowels, while the large intestine may still contain fæcal matter.

It has lately been proven that the urine of cholera patients is as poisonous as the intestinal discharges, and that the first diarrhœal evacuations are more virulent than the subsequent rice water excretions. The initial cases are not always the first to acknowledge sickness; much less do they always furnish the first deaths. The overseer's nurse had not yet complained of sickness, when her two children were already hopelessly ill; but she went into collapse and died the same night. In Lancaster, Kentucky, in 1873, a Mr. Benley came from Tennessee sick with choleraic diarrhœa. His father-in-law and a negro man who waited upon him, died first; and then 16 others preceded him to the grave, before he, the initial case, and introducer of cholera into Lancaster, finally succumbed. Such occurrences happen so frequently that no one who pretends to be acquainted with the nicer shades of the history of cholera can now ignore them.

In Pettenkofer's latest investigations (see *Cholera among Convicts*), which are destined to confuse the medical world for a long time, every conceivable thing which need not have been inquired into, is examined with the most finical minuteness; while almost all the most important points are totally neglected. All the new clothes, tow, flax, hemp, leather, boards, planks, iron, shoes, brass, lard, lead, writing paper, nails, olive oil, varnish, yarn, straw, starch, glue, alcohol, oakum, &c., were traced to their places of purchase; but no account was taken of the soiled clothes, blankets, beds and bedding of the sick. As many in every affected ward did not sicken or die, it was concluded that there was no infection or contagion. Ten months after the epidemic, Pettenkofer put twenty-five pounds of salt in a suspected drain, and as none of it could be detected in a huge well which supplied washing and drinking water to more than 700 persons, it was concluded that this water could not have been

fouled by numberless excrement tubs and pails which had been cleaned there during the epidemic.

In strong contrast to Pettenkofer's confused and confusing account is that from another convict prison (Rebdorf) in which Dr. Lutz detected all the diarrhœal cases coming from Munich, and showed the spread of cholera from one infected person to another, and from room to room and bed to bed, especially from infected and imperfectly cleansed blankets, and from washers and cleaners. Pettenkofer had 403 convicts to deal with and Dr. Lutz 440, yet the latter by watching and separating all his cases of diarrhœa and so-called intestinal catarrh, escaped with only 34 attacks of cholera and 22 deaths, while the former and his followers are responsible for 196 attacks and 83 deaths. Dr. Lutz did everything that he should do, and nothing that he ought not to do; while Pettenkofer did just the reverse. Dr. Lutz protected his drinking water by devoting two wells to that service only, and two others for washing and cleansing purposes, and one for the use of cattle. Pettenkofer allowed one well to be used for all purposes, and then overloads us with tables, calculations and percentages to prove, as all were not killed, that probably none were harmed.

ART. IV.—*Fœtus in Utero, with Remarks on Paternal and Maternal Influences.* By T. CHALMERS DOW, M. D., Professor of Gynæcology and Diseases of Children, Nashville Medical College, Tenn.

The subject in hand is one which is exciting wide-spread and profound attention in the minds of the profession. It is a curious theme; it possesses great interest, considered in the light of general physiology, and has intense practical importance, as viewed from the vulgar standpoint of *breeding*. The lower order of animals affords us innumerable instances, where the offspring exhibits more or less distinctly, in addition to the characters of the male by which they were begotten, the peculiarities, also, of a male, by which their mother had, at some former period, been impregnated; or, differently expressed, where the peculiarities of a male animal that has once had fruitful intercourse with a female, are more or less distinctly recognized in

the offspring of subsequent connections of that female with other males. This is such a well-known physiological law, or *occurrence*, that there are few who will gainsay it—surely, none who have been dog fanciers. It is not, however, asserted as a *general* law in animal physiology, and its operation is modified in different animals and under different circumstances.

It is for the physician and human physiologist to inquire whether or not the specified fact, with its bearings and relations, extends to his own species. Should it do so, it is for him to ascertain how far it applies; whether it may not admit of certain illustrations, and demonstrate *per se* accepted facts, in regard to the communication and constitutional effects of morbific poisons and diatheses—effects that manifest the principle of hereditary transmission, not only to flesh, bone and blood, but to all mental development.

In the May number (1877) of the *Virginia Medical Monthly* appears an article, "written by a lady of rare cultivation in Tennessee," with the caption, "The Influence of Mental Impressions of the Mother During the Stage of Utero-gestation upon the Fœtus." She gives us some instances in illustration which have come under her own observation, and quotes for us the 30th chapter of Genesis concerning the striped rods before the cattle at the water-troughs, thus antedating other authorities, who have ever alluded to the matter. She challenges professional acumen, "to dive into the subject with the investigating tools of a finely cultivated intellect and clear understanding and sap the pith and core of this wonderful and comprehensive cause and effect." She wishes the governing principles of this power simplified and explained, "so that even the most ordinary mind might grasp the governing laws, with the light of understanding, and thereby materially aid in the propagation and creation of a perfect race." She tells us that *great* men always proceed from gifted mothers. Then follows her suggestions as to how we must produce our poets, statesmen, etc. Now, here is what the genial Thackeray tells us in his "Roundabout Papers," as to the making of gentlemen. "Nature does make some gentlemen—a few here and there; but art makes most; good birth—that is, good, handsome, well formed fathers and mothers, nice, cleanly nursery maids, good meals; good physicians, good education, few cares,

pleasant, easy habits of life and luxuries, not too great or enervating, but only refining—a course of these, going on for a few generations, are the best gentlemen makers in the world, and beat nature all hollow."

We do not gainsay any of the postulates set forth by the gifted authoress in the *Monthly*, but we feel it incumbent, in this particular connection, to refer her to long lines of distinguished men who are thus distinguished by hereditary descent. The clergy afford us numerous examples—gifted fathers and distinguished sons. How often has the Adams family of Massachusetts furnished an illustration of this fact as to statesmanship? Perhaps Thackeray is more right than any of us; and when all other propositions fail, we have "natural selection" and the "survival of the fittest" to fall back upon.

Capable workers are engaged in this field of observation; their united efforts will explain away much of the superstition that has enshrouded "mother's marks," etc.; will inform us how we get our eyes, hair, idiosyncracies, talents and eccentricities; whether or not the mother does all, or the father is allowed to transmit his share in the beneficent process. If the decision results in favor of the maternal influence, our profession can expect to have, forthwith, an accession of born doctors. My lady's chamber must have a medical library disposed on its walls; or, her centre table a skull, or it may serve as her drinking cup, as in Lord Byron's case; Hippocrates, Celsus, Galen, Sydenham and Jenner in her album, may suggest thoughts of ancestral medicine; her penknife may be a bistoury; her scissors can be curved on the flat; her bodkin a probe; and she may herself be a graduate. We of the tame age of to-day will stand aghast at the progeny who come forth from a matrix imbued with such influences, such triumphs of mind over matter. Let us hope that while the subject is not yet fully decided, that the paternal influence amounts to something.

At the risk of trespassing on too much space, we furnish some facts, first, in relation to the lower animals.

"A young chestnut mare, seven-eighths Arabian, belonging to the Earl of Morton, was covered in 1815, by a quagga, which is a species of wild ass from Africa, and marked somewhat after the manner of the zebra. The mare was covered but once by

the quagga, and after a pregnancy of eleven months and four days, gave birth to a hybrid, which had distinct marks of the quagga in the shape of its head, black bars on the legs and shoulders, etc. In 1817, 1818 and 1821, the same mare (which had, in the meantime, passed into the possession of Sir Gore Ouseley) was covered by a very fine black Arabian horse, and produced successively three foals, all of which bore unequivocal marks of the quagga."

The same thing has been observed in cases where mares have been foaled by zebras.

It has been especially noted in the annals of blooded horses where records and pedigrees are so carefully preserved.

In his *Hand Book of Physiology*, Kirke especially alludes to this fact as having been frequently observed in bitches, where they had been impregnated first by mongrel and afterwards by pure dogs. Attempts have been made to establish this principle as a fact in connection with the human family. "It is affirmed that the human female, when twice married, bears occasionally to the second husband children resembling the first, both in bodily structure and mental powers."

If it be allowed that the male exerts certain influences on the constitution and the reproductive powers of the female, it may be conceived that, by each successive impregnation effected by him, that influence might be increased; and if so, then those children latterly begotten by him, rather than the elder, might be expected (*cæteris paribus*) to bear in a more marked degree the impress of their father's image. There used to be a popular belief that, with the lapse of years, a woman came to resemble her husband, not merely in respect of temper, disposition, or habits of thought, but in bodily appearance. If this belief be merged into a truth, could not that influence be exerted by the husband, through the medium of the fœtus in utero on the constitution of the wife? Then a physiological significance is given to the language of Scripture relative to man and wife; at least, when their intercourse has been fruitful—"They twain shall be one *flesh*."

Physiological writers have labored under many difficulties in attempting to explain this series of phenomena under consideration. It has been ascribed to a species of permanent impression made some how by the semen of the first male on the genitals,

and more particularly on the ova of the female; others have ascribed it to an abiding influence exerted by him on the imagination of the female, and operating on her mind at the time of her connection subsequently with other males, and, perhaps, during her pregnancy. Yet, this seems inexplicable. These causes and effects must be governed by cogent laws, all mysteries as they are. After the domain of physiology has exhausted itself in attempting explanations, we must look to the phsycologist to extricate us. Let us hope that Dr. Hammond and his co-laborers will assist us out of the dilemma; or, perchance, the subject may lie behind that veil where other vexed questions are enshrouded, and to all human enquiries, gives answer: "Thus far, and no further."

ART. V.—*Cosmoline.* By JOHN W. PIERCE, Pharmacist, &c., Richmond, Va. (Written for Richmond Pharmaceutical Association.)

I have endeavored, as far as possible, to obtain all the information from the literature of our profession to assist us in arriving at just conclusions as to the source, nature and uses of the preparations known as cosmoline and vaseline. There seems to be no doubt but that they are derived from the same source. Belonging to a class of bodies termed paraffines, they all have a similar chemical nature, but differ in their fusing and boiling points.

These products are derived from petroleum after the more volatile products have been removed by distillation. After the removal of the volatile principles, there remains a heavier oil, which is refined and purified by being passed through animal charcoal at a given temperature, without the aid of chemicals. The oil is thus entirely deprived of odor and taste. It is reduced to the density of a semi-solid or fluid by the aid of heat, and is then known as fluid or plain cosmoline.

An analysis of this product, according to Dr. Cresson, represents the fluid preparation as corresponding to that of petroleum oil freed of all earthy matter and free carbon, and also of the lighter and heavier paraffines and olefines. The plain cosmoline corresponds with the heavy petroleum oil, containing a large

amount of the heavy and light paraffines and olefines of the formula C_{16} H_{34} and C_{16} H_{32}, and only a very small percentage of those lighter than C_7 H_{16} and C_7 H_{14}.

From all I can gather, the preparation of vaseline is almost wholly, if not entirely obtained in the same manner as the above, and has the same physical properties and chemical nature. It is due, however, to the manufacturers of cosmoline to state that they contend they are entirely different products.

But with us it matters not whether they are or are not the same; we have to deal with them as therapeutic agents, and as a branch of that profession which is seeking to do what it can to best ameliorate and soothe the pains of our fellows, it is ours to adopt or reject, according to their real virtue, with what influence we have, those remedies which claim to accomplish this purpose.

Does cosmoline meet a therapeutic or a pharmaceutical want? I think it does. It is devoid of oxidation, which is very frequently the cause of much irritation in the application of ointments made from lard and cerate. It is also a better solvent for many of the medicaments for which ointments are composed. This I know to be true from my own experiments with it. This is not only true of cosmoline uncombined, but it also prevents changes in other preparations. I have now in my house ointments of sub-acetate of lead, belladonna, &c., made according to the officinal formula, and also the same ointments made of cosmoline. The latter are free from change, unctuous and smooth to the touch and yield readily to the heat of skin, while those of lard have a granular appearance and strong smell, proving that they have undergone chemical changes; they are hard and are not affected by the natural heat of the body to any considerable extent—in fact, are entirely unfit for use. I have exposed cosmoline to severe test to see if it would undergo change, but have seen none. These properties, coupled with the approving experience of the medical profession, are sufficient to establish its claim as a valuable agent.

It may be proper to add that the manufacturers of cosmoline will furnish, upon application, an analysis of their preparation. The manufacturers of vaseline, however, have paid no attention to a request I made of them by letter for a similar favor. If

any preference is given to one of these preparations over the other, I am disposed to accord it to cosmoline.

Were it within the scope of this paper to call attention to the therapeutics of cosmoline, I might add greatly to the length of this communication by recording the observations of a few of the physicians who have used this agent. I am told that it possesses the virtues of petroleum oil, although far less irritant—indeed, not at all so in its qualities. But it is especially its excellence as a substitute for lard in the preparation of ointments, etc., that concerns us as pharmacists.

Clinical Reports.

Case of Rupture of Perineum.—Operation—Recovery. By Thomas B. Wilkinson, M. D., Young's Cross Roads, N. C.

Mrs. M. A., well developed primipara, æt. 22 years, was taken in labor on July 5th, 1875. The physician in attendance stated that labor progressed rapidly with but short intervals between the pains. Notwithstanding the skilful attention given, an extensive laceration of the perineum resulted. I was hastily summoned. On examination (a short time after delivery), I found a rupture of the perineum extending obliquely downwards to the left side, reaching to, and involving the rectum. The rent extended up the bowel an inch, dividing the recto vaginal septum within the latter canal nearly two inches. I determined to close the parts immediately. The vaginal mucous surfaces were first closed with several fine interrupted sutures; and then carefully adapting the two portions at the orifice of the vagina, a needle, armed with a loop ligature, was passed through the skin and mucous membrane half an inch to the outer side of the rupture and as near the vaginal outlet as possible. The needle was pushed through, entering the right side and emerging the same distance from the rent as on the left side. The rectal cleft was then adjusted and a needle passed with a similar ligature through both sides equidistant from the edges as the upper suture. A third suture was passed through the middle of the space intervening between the upper and lower sutures. Two pieces of gum bougie were cut the requisite length. One piece being placed in the looped ends of the thread, the sutures were drawn on and their free ends tied around the other piece of bougie on the opposite side, accurately closing the parts.

This lady was suffering from considerable vesical irritation for-

bidding the retention of a catheter in the bladder. She was directed to take the knee-and-elbow position whilst passing her water, and lie on her back, keeping the limbs as closely together as possible. She made an excellent recovery. Sutures were removed on the eighth day—union perfect. During the treatment, the parts were washed twice a day in warm water slightly impregnated with carbolic acid, and a narrow strip of lint saturated in olive oil, to which a small quantity of carbolic acid had been added, was placed on the wounded parts within the vagina.

In the cases of ruptured perinei met with by me before this, I had invariably followed the course recommended by most surgeons, viz: wait for the subsidence of all parturient symptoms until the woman had gained as nearly as possible her former standard of health. But in so doing, the operation is necessarily magnified; the lacerated parts require to be "freshened up," and if the operation is successful, it necessitates the confinement of the woman to her bed again. It will also frequently be found after a delayed operation of this kind that the patient complains of a want of tone in the parts. She is troubled with a bearing down or dragging sensation at the bottom of the abdomen. The ruptured vagina has lost its tonicity and does not afford that basis of support so necessary to the proper retention of the uterus *in situ naturale*.

In the case reported, all the difficulties usually urged against an early operation were present. The vesical irritation forbidding the use of the catheter, considered so necessary for the proper treatment of these cases, attended with a free lochial discharge, existed, and yet the case was successful. I have never found it necessary to bind the limbs of the woman together. This plan of treatment soon excites the idea of a forced restraint in the mind of the patient not agreeable to her feelings; moral treatment has been found amply sufficient.

I would call the attention of the profession to a slight difference in the application of the first suture from that practised by most surgeons. It consists in the adjustment of the rent at the vaginal orifice first, for the maintenance of the regular outline of the vagina, for the future usefulness of the organ, is as necessary as the rectal outlet. Adapt the parts accurately together, first at the orifice of the vagina, and next at the rectum; and then the intermediate parts can readily be brought into apposition.

Rapid Recovery of a Case of Cerebro-Spinal Fever. By A. S. Alford, M. D., Shelbyville, Texas.

On April 13th, 1877, I was summoned to see A. C. C., æt. about 46 years, a farmer, of bilious temperament; full, muscular development. From the messenger, I learned that during the morning he had rigors or chilly sensations. I learned from his wife that during the absence of the messenger he had suffered intense pain in the head, extending to the back of the neck, accompanied with some nausea and vomiting. The patient was partially delirious or in a semi-unconscious condition when I arrived, about 2 P. M.

The most striking characteristic of his complaint was that presented by the condition of the muscular system—especially the posterior cervical muscles. The head was thrown back upon the vertebral column, and firmly fixed in that position, so that the patient could not move it forward; the temperature was but little above normal; pulsation of the radial artery was remarkably irregular—the intervals between the beats at times being quite alarming; pupils much dilated. Upon pressure over the abdomen, especially over the hypogastric region, pain was elicited. Another characteristic was general and marked hyperæsthesia.

I diagnosed this case as one of cerebro-spinal meningitis. I applied several dry cups over the cervical vertebræ; afterwards a fly-blister eight or nine inches in length and four in width was applied immediately over the cupped surfaces. I directed warm pediluvia—applied a warm poultice over the abdomen and administered a large dose of morphia. As soon as the blister began to draw, the patient fell asleep. After an hour or two of refreshing sleep, he awoke and complained of "pain in the head and down the back"; also of dizziness. He was more sensible of his condition; talked freely; pupils much dilated, and consequent diplopia, photophobia, etc.; pulse somewhat more regular, but the rhythm of the heart sounds was much interrupted.

℞. Elix. ammon. valerian.....℥j.

Sig. One tablespoonful every four hours.

℞. Potas. bromid.....℥j.
Morphiæ sulphat.....grs. ij.
Aq. rosæ.....℥iv. Misce.

Sig. One tablespoonful every two hours.

April 14. Patient did not sleep well last night; temperature nearly normal; thread-like pulse, but intermittent; the inter-

vals, however, were much shorter than yesterday. Occasionally the force of the heart's action would suddenly increase and again resume its former condition; bowels constipated; pupils still dilated; vertigo. Same treatment continued; in addition gave large dose of castor oil and turpentine, and apply a fresh poultice over the abdomen. Directed chloral hydrate to be given at night if patient did not sleep.

April 15. Having taken the chloral hydrate, the patient rested much better last night. No fever; pain in the abdomen removed; complained of pain in the back and loins; bowels still constipated. Administered a purgative dose of extract colocynth. comp. with pulv. rhei et aloes. Anticipating fever in consequence of non-action of the bowels, I ordered quinine in three grain doses every three hours during the day and succeeding night. The other remedies were continued as before. The patient rested well during the day except for a short time. While he was seemingly resting well, he was suddenly seized with intense pain over the region of the heart. The pain was promptly relieved in twenty-five or thirty minutes by the application of dry cups to the mammary and infra-axillary regions. I also applied a large blister over the cupped surfaces, which prevented a like recurrence, except occasionally the pain was felt, but only very slightly.

April 16. The purgative dose acted well; pulse much more regular, and approximating to the normal standard in frequency. Treatment continued.

April 17. The patient is much better; pupils contracted to nearly normal size; no fever. Discontinued the bromide of potassium, but continued the quinine in less doses.

℞. Phosphoric acid, dilut.....ℨss.
Elix. calisaya.....ℨij.
Glycerin.....ℨi.
Sherry wine.....ℨiij. Misce.

S. One-half ounce three times a day.

April 18. Patient rapidly convalescing.

Opium Poisoning Successfully Treated by Belladonna and Coffee.
By AUTHOR H. STEEN, M. D., Cottage Grove, Minn.

May 1. Mr. G., owing to domestic trouble, took fourteen drachms of laudanum and forty grains of chloral hydrate. I saw the patient four hours after he swallowed the poison. Found him totally unconscious; pulse 40; respirations 8; pupils closely contracted; body perfectly flaccid. Administered ten drops of fluid extract of balladonna hypodermically, and used

cold affusions over the head and chest; injected per rectum one-half pint strong coffee containing ten drops of fluid extract of belladonna. In five minutes' time breathing became easier; pupils somewhat relaxed.

At the end of two hours, patient showing some signs of returning consciousness, an emetic of salt and mustard was administered which soon acted, relieving the stomach of some of the poison which had not been absorbed. After the emesis, I administered ten drops more of belladonna in coffee by mouth. Patient was then taken between four men and walked continually for four hours, coffee being given frequently; and eleven hours after taking the poison, we had the satisfaction of bringing him to complete consciousness.

I had no electric battery, and depended solely on the belladonna and coffee. Had the stomach absorbed all the opium I think it would have proved fatal. Patient, for two weeks previous, had been in the habit of taking one dose at bedtime to procure sleep.

Original Translations.

From the German and French.

Poisoning by Salicylic Acid.—In the *Allg. Med. Centr.-Zeitung* for March 17th, 1877, we find a case of this reported. In February last, a peasant was taken with acute articular rheumatism, which attacked first one of the fingers of the left hand and then the knee-joint. The physician gave him, for the relief of the pain in the knee, an injection of about one-seventh of a grain of morphia, and ordered four powders of salicylic acid containing about twelve grains each—one of which was to be taken every hour. Soon after the administration of the first dose, the patient began to perspire very freely, and became so weak that his wife was unwilling to give him the fourth dose. After some time, however, this was taken, and soon after violent headache and vomiting came on, which lasted all night. The patient was totally unconscious, and breathed stertorously. He could only be aroused from the stupor for a moment, when he would complain of his head. All treatment proved unavailing, and he died forty hours after taking the first dose. There was no autopsy.

Inflammation of the brain, which occasionally comes on so rapidly as a complication of acute articular rheumatism, is not to be thought of in this case. All the symptoms point to poisoning. Recent examinations have shown that the sample of sali-

cylic acid was old and had undergone chemical decomposition—as was evinced, also, by the color and taste. Stricker advises that the preparations of this drug be always examined, and that the crystalline article only be used.

Menstruation in a Girl Three Years Old.—This case is reported by Dr. Wachs, of Wittenberg (*Allg. Wien. Med. Zeitung*, April 17th, 1877). Ida H., when she first came under observation on the 23d of February, 1876, was three years and six weeks old. In August, 1875, she first had a bloody discharge from her genitals, which returned regularly at intervals of three or four weeks—lasted three or four days, and was, in all respects, similar to the menstrual flow. The child has never been sick, and has a well proportioned body, and her muscles are also very well developed. Her size and weight, indeed, are such that her mother declares (and there can be no doubt as to the correctness of the statement) that the clothes of her seven-year-old sister fit her exactly. Both breasts are developed like those of a young woman; and the nipples are prominent and undergo erection when rubbed with the finger. The external genitals are well formed and covered with fine hairs. The labia minora are developed like those of an adult. The child underwent an examination without giving any evidence of shame as an older child would have done. When last seen by Dr. Wachs in August, 1876, she had continued to menstruate regularly. At that time she had twenty sound teeth which had been "cut" without the slightest trouble.

Stretching of the Nerves in Traumatic Tetanus.—By Dr. Paul Vogt, Professor in Greifswalde, (*Deut. Med. Wochenschrift*, No. 4, 1877).—The case reported by Professor Vogt was that of a laborer 63 years of age, who had his hand crushed by the fall of a stone. Under the antiseptic dressing, healing went on rapidly, but fourteen days after the receipt of the injury, trismus occurred, which, in spite of large doses of opium and local baths, developed into general tetanus, with intercurrent clonic cramps. Vogt then resorted to the separation of the edges of the wound and the simultaneous energetic stretching (dehnung) of the brachial plexus (in a central and peripheral direction), which was exposed by a vertical incision along the anterior border of the trapezius muscle, in the triangle formed by the trapezius, omohyoid and scalenus muscles. The injected nerve sheath was split and loosened nearly up to the spinal column. Immediately after the operation the tetanus disappeared and did not return. Vogt is doubtful to which of the operations [the opening up of the wound or the stretching of the nerves] the result is to be attributed, but he calls especial attention to

the harmlessness of the operation of stretching the nerves in this patient, who was quite an old man.

Cold Baths in the Treatment of Typhoid Fever.—The treatment of typhoid fever was freely discussed in the Société Médicale des Hôpitaux, at the meetings in January and February last. (*Le Progrès Médical*, March and April). M. Peter opposed the use of cold baths very strenuously. He considered this mode of treatment dangerous on theoretical grounds, because the blood might be thrown in on internal organs, thus causing congestions and increasing the liability to hæmorrhage; and furthermore, the weakness of the heart, so common in this affection, would render the patients liable to attacks of syncope when subjected to such treatment. M. Peter states that experience shows these theoretical objections to be well founded. Sudden death while in the bath occasionally occurs—an accident which seems never to have been observed by the older physicians. A physician of Lyons in an institution where this treatment was daily employed, a young physician of Ain, and M. Raynaud at the Lariboisière Hospital, have each seen cases of syncope during the bath; and the physician at Lyons and M. Raynaud do not hesitate to attribute the accident to the bath.

Nasal hæmorrhage, and also hæmorrhages from the bowels, are much more apt to occur in those patients who are treated by cold baths. Biermer, a great partisan of this mode of treatment, states that he often observes intestinal hæmorrhages, and that death may, in a certain number of cases, be fairly attributed to this accident. In the practice of M. Féréol, a woman was taken with epistaxis every time she was put in the bath.

In some cases the cold baths have set up regular inflammations. M. Proust has seen two patients treated thus die of pneumonia, and pleurisy, which is so rare a complication of typhoid fever, has been observed several times. M. Peter contends furthermore, that the nervous phenomena are not due to the elevation of temperature, which may be 41°, or even 42°C., without having any such disturbance.

Statistics show, says M. Peter, that the treatment does not give such results as could be desired. At Nimes the cold bath treatment has furnished a mortality of 29 per cent. Brandt himself had 15 deaths in 124 cases observed in the hospital. Biermer has had a mortality of 15 per cent.

MM. Raynaud and Féréol, who employed cold baths, had a mortality in their practice of 14 $\frac{96}{100}$ per cent, and 15.66 per cent. respectively; while MM. Desnos, Peter and Mesnet, who have employed the "traditional" mode of treatment, have had a mortality in their hospital practice of 13 $\frac{51}{100}$, 13 $\frac{69}{100}$ and 14 per cent.

Tracheotomy with the Galvano-Cautery.—At the meeting of the Société de Chirurgie, on April 11th, 1877, an interesting discussion took place on this subject.

M. Denucé communicated to the Society two cases in which he had performed this operation recently. Both patients suffered from the entrance of a prune stone into the air passages. His first patient was a man aged 40. The stone had lodged in the left bronchus and caused ulceration of the tube at this point, and very violent congestion of the lung on that side. M. Denucé attempted to remove the foreign body with a pair of curved forceps, but each time the attempt was made hæmorrhage occurred, and it had to be abandoned. Soon after the patient vomited a large amount of blood, and the prune stone was expelled at the same time, but owing to the loss of blood and congestion of his lungs, he died in a short time.

M. Denucé's second patient was a child. Emphysema and ulceration had already occurred before the patient came under observation. Tracheotomy was performed by the galvano-cautery, and during the paroxysm of cough which followed, the stone was expelled, together with a quantity of pus. Some days afterwards the child had a simple pneumonia, which yielded readily to treatment.

M. Verneuil thought the two observations of M. Denucé were favorable to the employment of the galvano-cautery for tracheotomy, and he thought it would be of special service in operations on children.

M. Tillaux, though an advocate for the operation, stated that he had recently seen quite a copious hæmorrhage on section of the thyroid plexus of veins, with the cautery.

M. de Saint Germain had seen the operation performed several times, and had never seen any hæmorrhage. M. Labric had performed the operation once in a boy 7 years old, in whom large, soft platinous sloughs formed and extended even to the trachea. He recovered, however, with perhaps slight narrowing of the trachea.

M. de Saint Germain preferred the use of the bistoury with children. In 94 operations he had seen but two cases of serious hæmorrhage. A large canula will usually check the bleeding immediately. M. Verneuil mentioned 15 operations with the galvano-cautery, in none of which was there any hæmorrhage. He thought the sloughing in M. Labric's case due to the fact that the operation was performed very slowly.—(*Le Progrès Médical* for April 14th, 1877).

The Therapeutic Value of Glycerin.—Glycerin has, for a long time, been employed externally. As an internal remedy, how-

ever, it has been used but little, chiefly on account of our ignorance as to its physiological effects. M. Chatillon has recently made a report to the Académie des Sciences on its physiological effects, and M. Constantine Paul to the Société de Thérapeutique on its therapeutic value.

In small doses glycerin increases the nutritive activity, as is evinced by an increase in weight. It diminishes the disassimilation by furnishing an aliment easy of combustion, and thus saving the fat of the organism. Less urea is excreted in the twenty-four hours.

Glycerin stimulates digestion; is easy assimilated, and rarely disagrees. When taken in very large quantity, a small amount may be found in the blood and urine. The elimination by the kidneys commences in less than an hour after being taken, and continues about five hours. It never causes glycosuria or albuminuria; it occasionally acts slightly on the bowels.

If taken in a very large dose at one time in the stomach, it produces symptoms similar to those of acute alcoholism; but if taken in small and frequently repeated doses, it only causes a moderate elevation of temperature. The dose is from one-half to one ounce a day; and it is frequently used in place of cod liver oil. M. Chatillou thinks it especially serviceable when oxydation is excessive, if combined with iron and quinine.

Correspondence.

Metastasis of Mumps.

Mr. Editor,—The reading of the reports of Dr. Page's cases of metastatic orchitis from mumps (May number, page 121), brought to my mind an epidemic of "mumps," which occurred in the bounds of my practice in Lowndes county, in this State, in 1843. Out of sixty or seventy cases, about ten per cent. had metastasis; three or four of these cases, in stout, healthy subjects, suffered *intensely*, until the doctor arrived and resorted to what proved to be a *specific*, viz: venesection.

Selma, Ala, May 20th, 1877. W. P. Reese, M. D.

King William County [Va.] Medical Association.

Mr. Editor,—We had quite an interesting meeting of our County (King William) Medical Association, at Aylett's, on May 3d. Dr. T. Braxton opened the debate on *Diphtheria* (the subject chosen

for discussion), in an elaborate paper, showing a careful consideration and thorough study of the subject. Nothing new was elicited with regard to it, and the profession seem to be considerably divided as to the best mode of treatment.

One feature of this Association, which is of peculiar interest and usefulness, is the appointment of three Fellows from different parts of the county to report a synopsis of their practice during the intervals between meetings; thus forewarning us of the approach of an epidemic, besides keeping the members informed as to the current diseases, etc. [A first-rate practical idea.—ED.]

Dr. R. G. Hill reported a case of *Phlegmasia Dolins*, and a very interesting case of *Intra-Uterine Fibroid Tumor*, removed by dilating the cervix with sponge-tents, and injecting carbolized water.

Dr. John Lewis read an interesting paper on *Congestive Fever*, (Pernicious Intermittent). This paper was read at a previous meeting, and was re-read at this one, by request of some of the Fellows who were absent at the former meeting. Dr. Lewis places great stress on maintaining the functional activity of the kidneys in this disease, and considers them the last bulwark (so to speak) behind which the *vis medicatrix* rallies her forces.

Very truly yours,

Aylett's, Va. GEO. WM. POLLARD, M. D.

Proceedings of Societies.

ARKANSAS STATE MEDICAL SOCIETY.

The second annual session convened at Hot Springs, May 1st, 1877. Dr. R. G. Jennings, Little Rock, Secretary. After the address of welcome by Dr. S. W. Franklin, and the response by Dr. D. A. Linthicum, of Helena, the President, Dr. W. B. Welch, of Boonsboro, delivered his address. He thinks little good is to come of petitions to the Legislature, and recommends the discharge of the committee on legislation, but urges the most thorough organization of the profession as a means of remedying the evils so long endured. Next, he favors the establishment of a State Board of Health. In another paragraph, he makes the surprising statement that there is no insane asylum in Arkansas, although one is much needed. He favors Dr.

Squibb's suggestions as to the revision of the Pharmacopœia. Concerning medical education, he calls upon the Society to use its influence to secure longer sessions at the colleges, and the grading of classes of students. A good point is made in the remark that the profession generally can benefit the cause "by sending better material to the schools,"

The report on vital statistics by Dr. R. G. Jennings showed that, of the deaths in the State Capital, where there are about four whites to one black, over one-half were colored—the principal cause being consumption. Previous to the war, consumption was almost totally unknown among the negroes.

The report of the delegates to the last session of the American Medical Association endorses the action of the Judicial Council which admitted their delegation as members *

The "Morrison Bill," praying Congress to remove tariff on quinine, was endorsed by resolution.

The following named gentlemen were elected officers for the ensuing term: President, Dr. A. N. Corrigan, Washington; Vice-Presidents, Drs. T. J. Pollard, A. A. Horner, D. McDowell, J. A. Stinson; Secretaries, Drs. R. G. Jennings and L. P. Gibson, of Little Rock; Treasurer, Dr. A. L. Breysacher, of Little Rock; Librarian, Dr. T. E. Murrell, of Little Rock.

Fort Smith was selected as the place, and the first Tuesday in

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* "Under all the circumstances," undoubtedly this Society should have been recognized. But a plainer case of "Grantism" was never exercised by power than the expulsion of the "old Society" which had violated no law, and was formerly recognized as in full affiliation. We are truly ashamed of such a decision as emanating from the Judicial Council of the American profession.

The editorial in our March number, 1877, has been strangely misconstrued into an attack upon the "new" Society. How it could thus have been perverted, we are unable to see, in view of our distinct and positive disclaimer. But as the action of the Judicial Council manifested a disposition too characteristic of this day in other circles, and might possibly hereafter be referred to as a precedent, we intended to rebuke the Council in the most emphatic terms. That we are not alone in this censure of usurpation of power, is plainly manifest by a review of the editorials and correspondence in the medical press. Were we to consult purely journalistic interest, we would advocate the action of the Judicial Council, seeing that it is the popular side of the question. But when the *Monthly* ceases to condemn, in the most positive language, what it believes conscientiously to be wrong, it must find another editor. Let it be distinctly understood, however, that it is not the "new" Society that we oppose; on the contrary, we wish it success, and will cheerfully lend it all the help we can to give it strength and permanence. But it is the unjust action of the Judicial Council acting for, or endorsed by the American Medical Association, which expelled a regularly organized body, without sufficient cause, that we write against. We hope our position is made plain. We have no personal feelings in the matter, except that, being jealous of the honor of the American profession, we wish to find its rulings always plainly right and just.—EDITOR.

May, 1878, as the time of meeting of the next annual session.

A number of interesting scientific papers were presented, which, upon motion of Dr. E. T. Easley, were referred to the Publishing Committee, with instructions to examine the same, and, if deemed worthy, were to be returned to the authors, with permission to publish, as having been read before the Society.

The President appointed Dr. E. T. Easley to deliver the address on Surgery at the next meeting; Dr. E. R. DuVal, of Fort Smith, on Practice of Medicine; Dr. D. A. Linthicum, of Helena, on Gynæcology and Obstetrics.

The meeting was, in all respects, a most pleasant and profitable one, and was largely attended, and the Society is in a flourishing condition.

The Publication Committee deserves special commendation in getting out the volume of Transactions at so early a day, although it contains no scientific papers.

ARKANSAS STATE MEDICAL ASSOCIATION.

(Compiled from St. Louis *Clincal Record.*)

The seventh annual meeting convened at Hot Springs, April 24. Dr. W. H. Barry, of Hot Springs, President; Dr. D. H. Dungan, of Little Rock, Secretary.

Eight local Societies were represented by delegates.

Dr. W. B. Hazard, editor of St. Louis *Clinical Record*, being present, in response to call, addressed the meeting in encouraging terms.

The Committee on Diseases Incident to the different Sections of the State, reported through Dr. Sessums, which awakened an interesting discussion on malarial congestion.

Dr. Cross, of Little Rock, introduced resolutions, which were adopted, looking to reform in Medical education. These resolutions opposed the "nine months' system" and the acceptance of beneficiary scholarships; but they favor four years' course of study and the "graded system." The resolutions also advise against advising students to attend medical lectures until they possess a good English education and know the rudiments of Latin.

Dr. Barry delivered the President's address during the second evening. It is published in full in the May number of the St. Louis *Clinical Record.*

The following officers for the ensuing term were elected: Dr. J. A. Dibbrell, Jr., Little Rock, President; Drs. J. L. H. Sessums, T. J. Reid, J. M. Gist, Vice-Presidents; Drs. D. H. Dungan and J. M. Pirtle, of Little Rock, Secretaries.

Dr. Cross offered resolutions pledging adherence to the organization, and expressing reliance upon the sense of right and equity of the American profession to sustain it.

Little Rock, on fourth Tuesday of May, 1878, place and time of next meeting.

The President-elect and nine others were appointed delegates to American Medical Association.

The usual committees were appointed and thanks voted. An enjoyable entertainment was given by Dr. T. J. Reid.

MEDICAL SOCIETY OF THE STATE OF WEST VIRGINIA.

The session convened in Clarksburg, May 30. Dr. E. A. Hildreth, of Wheeling, President, in the chair; Dr. W. M. Dent, Secretary. After addresses of welcome by Dr. J. W. Ramsay and Major J. C. Vance, the President delivered his annual address.

Dr. C. Shriver, Chairman of the Committee on Surgery, submitted a report, which was referred for publication.

Dr. H. W. Brock presented a report on State Medicine and Public Hygiene for the second district, after which, on presentation by Dr. Shriver, it was resolved that a copy of the next Transactions be sent to each newspaper in the State, with request to publish Dr. Brock's report.

On presentation by Dr. John C. Hupp, of Wheeling, it was resolved that it is the first duty of States and municipalities to make a sanitary survey of the water supply, to preserve it against all avoidable contamination; and that no municipality should introduce the water system without at the same time providing a co-extensive sewerage system.

Dr. Hupp read a report of a case of Phymosis and Adherent Prepuce, with remarks, which were referred to the Publishing Committee.

A complimentary theatrical entertainment was given the Society at night.

May 31. Dr. John Frizzell read a paper on Nervous Disorders and Hysterical Affections. Referred.

Dr. D. B. Ward, of Wheeling, read a paper prepared by Dr. S. L. Jepson, on Ovulation. Referred.

Dr. E. A. Hildreth exhibited several wire specula invented by himself.

On presentation by Dr. Hupp, it was resolved that those whose membership in the Society has been discontinued simply because of being in arrears, be reinstated upon payment of all dues.

Dr. Cooper, of Brooke county, submitted a paper on Ulceration of the Os Uteri. Referred.

Dr. J. B. Simons' Essay on the Importance of Pure Air, and a few Hints in regard to Ventilation from a medical point of view, was referred to the Publishing Committee.

Dr. M. S. Hall presented for Dr. T. B. Camden, of Weston, a report of a case of Gunshot Wound of the Brain—the Ball remaining imbedded for Thirteen Years. Referred.

Dr. J. M McWhorter reported a case of Epilepsy of fourteen years duration successfully treated. Referred.

Dr. J. M. Lazzell, of Fairmont, read a paper on Contagion and Typhoid Fever, prepared from notes in practice. Referred.

On motion of Dr. Shriver, it was ordered that 400 copies of the forthcoming Transactions be issued.

On presentation by Dr. Hupp, it was resolved that a committee of three be appointed to renew the appeal to the Legislature to establish a State Board of Health.

The President made the following appointments: Publishing Committee, Drs. M. E. Hullihen, M. S. Hall, J. C. Hupp, M. Campbell, C. Shriver; Necrological Committee, Drs. James H. Manoun, H. M. Gamble, J. M. Cooper, W. H. Sharp, A. L. Knight.

New Remedies—Medical: Dr. J. O. Wall; Surgical, Dr. John Frizzell.

State Medicine and Public Hygiene, Drs. M. S. Hall, Wm. J. Bland and L. F. Campbell.

Essayists: Drs. H. W. Brock, J. H. Brownfield.

Delegates to Medical Society of Virginia to convene in Petersburg October 23, 1877: Drs. G. W. Bruce, T. A. Harris, Lawrence Carr, T. B. Camden, J. W. McSherry.

To Medical Society of Pennsylvania: Drs. C. Shriver, J. E. Kendall, W. F. Vankirk, Wm. Frey, E. H. Moore.

To Ohio Medical Society: Drs. S. L. Jepson, J. Young, T. R. Charter, B. H. Hoyt, D. F. Roush.

Dr. Shriver gave a verbal report of an extra capsular fracture of the head of the humerus.

Dr. Frizzell, on behalf of the committee to examine a case of chorea in a boy 11 years of age (presented by Dr. Ramsay), reported that there was great sensitiveness in the lower lumbar and dorsal vertebræ.

Election of officers resulted as follows: President, J. W. McSherry; Vice-Presidents, Drs. W. M. Dent, J. B. Crumrine, D. B. Ward; Secretary, Dr. M. F. Hullihen; Treasurer, Dr. John C. Hupp.

Weston, Lewis county, was selected as the place of next annual meeting, on third Wednesday of May, 1878.

RICHMOND ACADEMY OF MEDICINE.

April 17. **Linimentum Sinapis Compositum.**—Dr. E. T. Robinson exhibited a sample of this liniment of the British Pharmacopœia, with the remark that it was an excellent spinal excitant without the production of the troublesome eruption so obstinate in healing after the ordinary mustard liniment or plaster.

Cancer of Stomach.—Dr. M. L. James exhibited a pathological specimen which had been removed by Dr. Wilkerson from near the pylorus of a patient in the Almshouse. The duration of the disease, judging by symptoms—rather want of symptoms—was only three months.

Dr. L. S. Joynes read the report of a case of Infantile Paralysis of peculiar interest, which will appear in our next issue.

Fracture of the Femur without Shortening.—Dr. W. W. Parker reported the case. Indeed, the limb was little longer than the uninjured one.

Dr. F. D. Cunningham reported a case of *Successful Amputation at the Hip-joint*, which we hope to give in full in an early issue.

May 1. **Correction.—Salicylic Acid.**—Dr. J. N. Upsher said he had been wrongly reported in the *Monthly* in its report of proceedings of April 3d. He stated he had found marked benefit from the use of salicylic acid, gr. xv, three times daily, in a case of stricture of the rectum with profuse purulent discharge. Local remedies applied to a supposed ulceration above the stricture failing to give relief, and also the fact that his patient was suffering with acidity and flatulence led him to conclude that the discharge was due to fermentation of food; hence the salicylic acid. [The Secretary failed to make report of this in the minutes.]

The subject of *vaginal injections* was discussed by several members, but nothing new was elicited.

MEDICAL SOCIETY OF NORTH CAROLINA.

The session convened in Salem, May 22d. The President, Dr. G. A. Foote, of Warrenton, in the chair. Dr. L. J. Picot was appointed Secretary *pro tem.*

Dr Chas. O'Hagan and R. L. Payne made some interesting reports of cases in practice.

Dr. H. E. T. Manning, of Baltimore, one of the editors of the *Maryland Medical Journal*, being present, was invited to a seat with the body. He offered the use of the columns of his journal to the Society, which courtesy was recognized in an address of thanks by Dr. O'Hagan.

Upon presentation by ———, it was resolved that as the present tariff on quinine is unjust, onerous and cruel to the needy poor, and as in now revising a tariff, an opportunity is allowed of giving quinine duty free, Congressmen should be requested to use their earnest efforts to have the tariff removed. Drs. S. S. Satchwell, Duffy, Graham, Picot and Hill were appointed a committee to properly present the resolution.

Dr. R. H. Towles, by request, acted as Secretary.

Dr. Eugene Grissom, of Raleigh, read an able and exceedingly interesting paper on Epilepsy, which was referred to the Committee on Publication.

At night, Drs. Hyatt and Duffy reported some very remarkable cases of epilepsy.

Dr. L. B. Edwards, of Richmond, Va., presented his credentials as fraternal delegate from the Medical Society of Virginia, and was fraternally received.

Dr. S. S. Satchwell, Chairman of the Committee on State Board of Health, during morning session of second day, read a full account of his labors, and the law as enacted. The State Medical Society virtually becomes the State Board of Health, and the sum of $100 is to be annually appropriated by the State to facilitate the working of the said Board. Had a larger sum been asked for, the whole plan would probably have fallen through, but the Committee regards even this small appropriation as the beginning of better things.

It was moved and carried that Dr. Satchwell be relieved from the payment of dues to the Society for life, and that Dr. G. A. Foote be so relieved for two years, as slight testimonials of regard of the Society for their earnest endeavors towards the passage of the bill constituting this Society the State Board of Health.

Drs. R. L. Payne, Chas. O'Hagan, H. O. Hyatt, S. S. Satchwell, —— Kirby and —— Ashton, were appointed a committee to draft a plan for the complete organization of the Board.

This committee recommended that the interests of the State Board be committed to a sub-committee, as follows: Dr. S. S. Satchwell, Chairman; Thomas F. Wood, of Wilmington, Secretary; Drs. Graham, Duffy, Hines and Foote.

Dr. Graham, of Charlotte, upon call, read a very valuable report upon Gynæcology. Referred.

Dr. Grissom announced the death of Dr. W. G. Hill, of Raleigh; and Dr. O'Hagan announced the death of Dr. Thomas Duffy, of Rutherfordton. Drs. Grissom, Johnson and O'Hagan were appointed a committee to prepare resolutions expressive of the loss felt by this Society in the death of these two members.

The Committee on Medical Colleges in North Carolina reported through its Chairman, Dr. Almon Holmes. The report urged that the Legislature be petitioned to rescind the charter of the Edinboro Medical College, located in Robeson county, and which is guilty of practices which degrade medical education in the State.

The committee to select place and time of next annual meeting recommended Goldsboro as the place, and the second Tuesday in May, 1878, as the time.

At night, Dr. Shaffner, of Salem, delivered the annual address before a large audience of ladies and gentlemen. He gave a very excellent review of the progress of the Science of Medicine down to the present century.

Diphtheria and its Treatment was selected as the subject for discussion at the next annual meeting, and Dr. Charles Duffy, Jr., of Newberne, was appointed as leader.

During the morning of the third day, the President, Dr. Geo. A. Foote, delivered his address, selecting as his subject *Hypodermic Medication*. He is a warm advocate of the measure, and he brought forward some valuable points.

Dr. Thomas F. Wood read a lengthy paper on Vaccination—especially reviewing the evidence in regard to the question of transmission of diseases by the operation.

Dr. H. T. Bahnsen, of Salem, read a paper of unusual interest on the subject of *Puerperal Convulsions* containing some new suggestions. This paper will appear in full in the *Monthly* at an early day.

Dr. Charles Duffy presented, as a pathological specimen, one of the arteries of the brain, beautifully dissected, the lesion or disease being embolism. He gave, in addition, a most interesting verbal account of the case.

Dr. Bahnsen exhibited some pathological specimens of the uterus.

Dr. R. L. Payne, of Lexington, was elected President for the ensuing year, than whom a better selection could not have been made. Dr. L. J. Picot was elected Secretary—Dr. James McKee having resigned.

Analyses, Selections, &c.

Viburnum Prunifolium (Black Haw); Its Uses in the Treatment of the Diseases of Women.—Edward W. Jenks, M. D., Professor of Medical and Surgical Diseases of Women, etc., in the Detroit Medical College, has a paper on this subject in the first volume

of Transactions of the American Gynæcological Association, which we copy almost entire.

Among the most ornamental of our native shrubs, is a plant belonging to the well-known genus, viburnum—the same which furnishes our familiar "snow-ball bush," the "cranberry tree," and the "sheep-berry"—to which botanists have given very appropriately the specific name "prunifolium" ("plum leaved").

Its erect, tree-like habit of growth, the regular form and delicate toothing, but more especially the glossy green of its leafage, render it an attractive object throughout the season, and it is conspicuous for beauty when, in the early spring, it puts forth its dense clusters of snowy blossoms. It is indigenous in our Southern and Western States, where like its Northern congener, viburnum lentago, or sheep-berry, it is generally found in dry copses and open woodlands.

Only within a few years has this plant been brought to the notice of the profession as a valuable therapeutic agent, and it has already won for itself a high place in the favorable estimation of the few who have learned its virtues by practical experience.

The portion which is used in medicine, is the bark of the root and the bark of the young shrubs and newly grown twigs; but if procured in the proper season, the bark of the root is to be preferred.

Dr. Phares, of Newtonia, Miss., in 1866, wrote an article on the uses of the vibernum, which was first published in the *Atlanta Medical and Surgical Journal*, and subsequently appeared in the *Detroit Review* for December, 1866, the *Boston Medical and Surgical Journal* of October 10, 1867, and other medical journals of the country.

Dr. Phares attached particular value to this remedy for the prevention of abortion. He designated it as a "nervine, antispasmodic, tonic, astringent, and diuretic," and adds: "But it is particularly valuable in preventing abortion and miscarriage, whether habitual or otherwise; whether threatened from accidental cause, or criminal drugging. It tones up the system, preventing or removing those harassing nervous symptoms that so often torment and wear down the pregnant woman and disqualify her for the parturient effort. It enables the system to resist the deleterious influence of drugs so often used for the purpose of procuring abortion.

He further alludes, in the same connection, to the habit common among the negro women on some of the Southern plantations, of taking a decoction of gossypium, or cotton root, for the purpose of procuring abortion, and says: "Some farmers

on whose plantations I have used the medicine, and who have seen much of its effects on negro women who had always managed to miscarry, declare their belief that no woman can possibly abort if compelled to use the viburnum" "This may be claiming too much for it," he adds, "but it has certainly prevented abortion in every case in which I have ordered it for the purpose."

About the time Dr. Phares' article appeared in print, he sent some of the drug to the editors of the *Review*, of whom I was one, requesting that its virtues might be tested. My associate, Dr. Andrews, and I used it in a number of cases of threatened abortion, and were so well pleased with its effects, that I have ever since continued to rely upon it as one of the most efficacious remedies we have for this trouble.

Of course no intelligent physician expects, that when an abortion is fairly begun by detachment of the ovum, or when a portion of it is extruded from the uterus, *any* remedy will prevent its ultimate expulsion; the mischief is already done; the vital connection of the fœtus with the mother is destroyed, and no measure can preserve its life.

Dr. Phares, in the paper alluded to, relates a number of cases that illustrate the value of viburnum. I have prescribed it myself in scores of cases, where I should have little hope of success in following the usual routine of treatment, and the results have more than fulfilled my most sanguine expectations. I shall not overstate the fact if I say, that no one remedy or means has proven of equal value in my hands—and I have tried faithfully all the common and time-honored methods of treatment.

Dr. Andrews, of Detroit, with a large family and obstetrical practice, informs me that he considers viburnum an invaluable prophylactic against abortion; he places more reliance upon this than on any other remedy at our command. Several other practitioners have expressed to me their opinion of its value in similar terms.

That viburnum has a powerful influence in preventing threatened abortion, appears, therefore, to be a fact well established. I could myself relate case after case in illustration of its efficacy, but the mass of evidence already accumulated and in the hands of members of our profession, would render this a superfluous task.

I am convinced, however, from conversation with physicians of large obstetrical experience, that the number of those who are practically familiar with the drug is extremely small. I have myself induced a number of my professional acquaintances to give it a trial, recommending it especially in those cases

where abortion has become habitual with a woman, and I believe that none who have been persuaded once to test its efficacy, are now willing to omit viburnum from the list of those remedies which they regard as indispensable. It is for the reason that an agent, which has stood the tests of time and repeated experience in the hands of a few, has for some unaccountable reason not become universally known, that it is now brought to the attention of this Society.

Where the habit of aborting has been formed, my mode of prescribing the viburnum is, to have the patient take from half a teaspoonful to a teaspoonful of the fluid extract four times a day, beginning at least two days before the regular menstrual date, and continuing it not only during the usual period of the catamenial flow, but two days longer than that discharge continues when the woman is not pregnant. Where there are indications that an abortion is imminent, the fluid extract can be administered in teaspoonful doses every two or three hours as long as its use seems to be demanded.

The writer would designate viburnum prunifolium as a uterine sedative, whose action is as pronounced, as is that of ergot in causing uterine contraction. It is not alone in the prevention of abortion that it proves, by virtue of this peculiar sedative action, a most valuable therapeutic agent. It proves equally efficient in the treatment of the sympathetic disorders incident to pregnancy, where a nervine or sedative is demanded, and in a large class of non-puerperal diseases of women. The use of viburnum in this last mentioned class of cases deserves more attention than it has hitherto received, and will occupy the remaining portion of this brief paper.

It could not be otherwise, than that a remedy which is known to exercise such a potent effect upon the pregnant uterus, must be of much service in many affections of the non-pregnant woman. I am convinced, from an experience in its use extending now over more than six years, both in private and hospital practice, that viburnum is a valuable acquisition to the gynecologist's list of remedies.

I would give as a general statement concerning the uses of viburnum, that it is serviceable in all uterine disorders characterized by loss of blood.

In menorrhagia, or metrorrhagia, depending wholly upon systematic causes, as *e. g.* that in phthisis, organic diseases of the heart, hepatic disorders, anæmia, or malarial diseases, it is peculiarly applicable. There is no depressing effect succeeding its administration; on the contrary it is a grateful tonic, serving to stimulate rather than depress. Patients for whom I have pre-

scribed it without informing them for what purpose, have repeatedly spoken of its pleasant, stimulating effects. In the metrorrhagia incident to the menopause with the multiplicity of nervous derangements from which women suffer at this period, viburnum has proven very beneficial. It will modify the hæmorrhage caused by uterine growths, but it will not answer to claim for it, in this class of cases, what we expect from ergot. In hæmorrhage from such causes, where ergot in full doses is not well tolerated, or where the patient is in a feeble condition, I have been in the habit of combining the two remedies in various proportions, with gratifying results. I have never known painful uterine contraction to be produced by viburnum alone, nor do I think that oxytocic effects can be attributed to it.

Viburnum is serviceable also in certain forms of dysmenorrhœa. My attention was first directed to its worth in this affection several years ago, by the remark of a patient for whom I had prescribed it for a profuse menstrual discharge. She said that she had taken the medicine during the menstrual periods, beginning two or three days before each, and that there was not only a diminution in the quantity of blood, but that menstruation was more nearly painless than it had been before for years. This remark was suggestive, and I have since given viburnum alone such a thorough trial in the various forms of dysmenorrhœa, that I have arrived at the following conclusions: In all forms of dysmenorrhœa attended with profuse menstruation, viburnum, if administered for several days in advance of the period, as well as during the continuance of the discharge, affords the patient great relief. Where there is with the dysmonorrhœa a scanty flow, it does not prove beneficial. If the pain is produced by stenosis, or any mechanical obstruction, it affords only moderate relief. It is not sufficiently sedative, if given alone, to fully relieve the sufferings of spasmodic or neuralgic dysmenorrhœa. It is, however, a valuable adjuvant to the sedative and anti-spasmodic remedies, such as cannabis indica, camphor, hyoscyamus, and conium.

In that form of dysmenorrhœa with menorrhagia, caused by fibroid growths impinging upon and twisting the uterine canal, viburnum, in combination with ergot, has proven beneficial, and much more so than either remedy if given without the other.

The period of years during which the writer has made almost daily use of viburnum, warrants him in speaking confidently with regard to the results following its use; the method of its physiological and therapeutic action he is content, at present, to leave for others to explain.

It is not claimed for it that it possesses merits that will cause

it to supersede or supply the place of many surgical procedures in gynecology, or that its administration is always followed by the desired results.

The Actual Cautery—Its Employment in Cutaneous Surgery. Henry G. Piffard, M. D., Professor of Dermatology, University of New York, Surgeon to the Charity Hospital, etc., in the Charleston *Medical Journal and Review*, for January, 1877, has an interesting paper, from which we make the following extracts:

During the past year, the prominent objections to the employment of the actual cautery have been dissipated by the invention of three wonderfully efficient and convenient galvano-cautery batteries of American construction. I allude to the recently patented instruments of Drs. Dawson and Byrne, and to the one (not patented) made by the Galvano-Faradic Manufacturing Company of this city.* In addition, a cheap cautery instrument, (not a battery) capable of fulfilling many of the requirements of actual cauterization, has been recently invented by Dr. Paquelin, of Paris. Dr. Allan McL. Hamilton, of this city, has also recently revived and improved an old cautery instrument, the origin of which I am unacquainted with. It will do about the same work as the Paquelin cautery, and is cheaper. Finally, the solar cautery, a lens four inches in diameter, and six inches focus, must not be forgotten.

The principal affections of the skin in which the actual cautery has been found of service will be mentioned below.

Rosacea.—In the *second* stage of this affection we frequently find the veins of the nose, more especially those of the alæ, greatly distended, and more or less varicose. An important step in the treatment of this affection is obliteration of these enlarged veins. This may be effected in various ways: by division of the veins with a suitable cutting instrument, by injection of coagulating substances, or by the actual cautery. This latter may be accomplished with a platinum wire heated by a spirit lamp, or better by means of a small battery. For this little operation, the two cells of an ordinary induction machine will generate sufficient heat, provided quite a fine wire is used. The vessel to be operated upon should be just touched with the wire heated to whiteness. The result will be obliteration of the vessel, reduction of a good deal of the congestion and infiltration around it, and ultimately a minute punctate scar, the size of

* These three instruments are in every way superior to anything of the sort manufactured abroad. They are likewise much cheaper than the less efficient instruments of two years ago.

which will depend upon the care and delicacy with which the operation is performed. In the *third* stage of this affection, characterized as it is by great hypertrophy of the parts, the actual cautery has been satisfactorily employed by Richet.* In this case the heated wire should penetrate the whole depth of the thickened integument at several points. The result will be shrinkage of the parts and lessened deformity.

Varicose Veins.—I have in several instances secured obliteration of enlarged veins of the lower extremity by bringing the white hot platinum (heated by electricity) *almost* in contact with the vein. The platinum should not quite touch the skin, and should be held in position for a minute or more. The immediate result will be a blister upon the surface, and ultimately obliteration of the lumen of the vessel, and a pigment spot, more or less permanent, upon the integument.

Angioma.—I here refer to the little blood red vascular elevations, whose size rarely exceeds that of the head of a match. They are frequently, in fact generally, multiple, existing upon the face and elsewhere to the number, sometimes, of twenty or thirty. A fine wire well heated is the neatest and quickest method of disposing of them.

Nævus Vascularis.—The purely superficial capillary nævus (wine-mark) if quite small, may very properly be treated by the galvano-cautery, delicately applied. The solar cautery has also given good results in the same. Extensive "wine-marks," however, demand other treatment—Squire's scarification method being probably the best. If the nævus, instead of being purely capillary and superficial, is composed of vessels of some size, and is located in the subcutaneous tissues as well as the skin, or if it projects above the surface, actual cautery is an effective method of treatment, whatever be the size of the lesion. These nævi are usually treated by injection, ligature, electro-puncture (electrolysis so-called), caustics (potasa fusa, etc.), or actual cautery. If cautery is selected, the instrument should be heated to a *red* heat only, introduced and kept in *situ* some little time. If *white* heat were employed there would be considerable danger of hæmorrhage. If the instrument is inserted perpendicular to the surface of the nævus, a cicatrix corresponding to each puncture will result. When, however, the nævus is considerably elevated, the best way of operating, in my judgment, is to make a small incision or puncture with a scalpel, just through the skin at the edge of the nævus, then introduce galvano-cautery wire cold, close the battery circuit, and let the wire heat gradually, taking care that no more heat is employed than would suffice to redden

* L'Igni puncture, etc., par TRAPENARD. Paris, 1873.

the wire in the open air. When this is attained, open the circuit and carefully withdraw the wire. By this method of operating there will result coagulation of the blood and destruction of the vessels to a considerable extent around the wire, and very little risk of hæmorrhage. The skin outside the nævus should be protected at the point of puncture by means of asbestos. In general, however, I think electro-puncture (with the positive needle only) preferable to cauterization in the treatment of nævus, as when properly performed less scarring results.

Lupus.—In the severer forms of tubercular, ulcerative and rodent lupus, there can be no question that actual cauterization (where excision is impracticable) is the most satisfactory method of treatment, and it is to be altogether preferred to the potential caustics. In several of these cases the results have been extremely gratifying. There is, however, another form of lupus, called by Kaposi, the orbicular variety of erythematous lupus, which in an advanced condition is characterized by a ring of infiltrated tissue, enclosing a portion of skin, reddened and perhaps thinned, but not accompanied with ulceration. The tendency of the affection is to extend centrifugally, and to result in atrophy of the portions of tissue involved. The therapeutic indication is to check the extension of the lesion. This may be effected by applying a fine white-hot wire along the outer edge of the infiltration, and burning through the whole depth of the skin; the resulting circular cicatrix will form a barrier across which the lupous infiltration will not extend, and the final result will be a white depressed scar corresponding to the whole of the surface that has been invaded by the disease.

Epithelioma and Cancroid.—Epithelioma of the lower lip, when the lesion is exuberant and forms more or less of a tumor, is most conveniently removed by excision; but when the lesion is ulcerative and depressed, and without much peripheral infiltration, the actual cautery white-hot appears to be preferable. In treating cancer and lupus in this way the cauterization must be thorough; mere scorching of the parts will not answer. The diseased tumor must be *destroyed*, otherwise the cautery will act as a stimulant; and upon the shedding of the very superficial slough, morbid action will be renewed, and the patient be injured rather than benefitted by the operation.

Ulcers.—I have, on several occasions, beneficially modified indolent and ill-conditioned ulcers by cauterization at a white heat.

Chancroids.—It is in this affection especially that the actual cautery has given me remarkably good results. One good white-hot cauterization being sufficient to destroy the virulent proper-

ties of the sore, and upon fall of the slough to leave behind a granulating ulcer with tendency to heal. This method materially shortens the time of treatment, as I have elsewhere shown.* A. Paquelin's, or Hamilton's cautery, will be found very convenient, and in some respects better than the galvano-cautery, in the treatment of these lesions. A few experiments satisfied me that the indurated *chancre* is not beneficially influenced by the cautery.

Venereal Warts.—The most effectual treatment of these is to snip them off with scissors, and to touch the bleeding bases with the red-hot wire. This stops the hæmorrhage, and effectually prevents the return of the original trouble.

Pediculated Tumors of the Skin.—Amussat† has several times removed pediculated tumors from the skin, by means of the galvano-caustic loop or knife. The only object of using the cautery in cases of this sort is the avoidance of hæmorrhage or of *sepsis* in a crowded hospital ward; otherwise cold steel would be preferable. Personally I have removed but two pediculated tumors by cautery. One was a lobulated tumor the size of a pigeon's egg, removed from the right labium majus, and the other was an enlarged *præputium clitoridis*, which after removal was found to weigh between and six seven ounces.‡

Circumcision and division of the prepuce in the medio-dorsal line have occasionally been effected with the cautery loop or knife. but not by myself, as I have not yet met with a case in which the operation appeared justifiable. I can conceive, however, of its being suitable and proper, if circumcision is imperatively demanded in the presence of a sub-preputial chancroid, the latter being also thoroughly cauterized at the same time.

In making delicate applications where but small points only are to be touched with the glowing metal, the eyes of the operator should be guarded with blue glass spectacles; otherwise the intense glare will prevent a distinct view of the point to which the application is to be made. In using the solar cautery, this is specially important.

Glycerite of Kephaline.—Dr. E. Wiley, of Philadelphia, contributes the results of some observations with this remedy to the Louisville *Medical News*, June 2d, 1877. Dr. Polk applies the name, kephaline, to the brain hypophosphites in their normal union with albumen and glycerin. This combination consists of the brain hypophosphorous acid and the brain hypophosphites

* Archives of Clinical Surgery, November, 1876.
† Memoires sur la Galvano-Caustique Thermique. Paris. 1876.
‡ The case is reported in the American Journal of Obstetrics, Aug., 1876.

of calcium, magnesium, sodium and ammonium, formed into solution and preserved in chemically pure glycerine.

The therapeutic properties of glycerite of kephaline are nutrient and tonic. In loss of memory following intense mental action, whether of the emotions or the intellect, or from sexual abuses, it very promptly acts on the normal brain power. Dr. W. writes: "I have yet to witness the first failure to restore brain efficiency out of more than twenty cases."

In depreciated health following sexual excesses, and also in impaired procreative power, Dr. W. has witnessed more satisfactory results from this than from any other agent. Glycerohypophosphorous acid, associated with the alkaline hypophosphites, constitute a large amount of the seminal fluid. Whatever entails a heavy loss of these must entail a heavy drain of these hypophosphites, and thus impose the injuries consequent upon the deficiency.

Dr. W. has used glycerite of kephaline since 1872 with uniform success in the early stages of consumption. Even after the lungs have become badly infiltrated, and yet before tyrometous softening, he has also seen excellent results follow its use, although he does not think he has ever cured a case by the remedy alone; but the improvement has been more decided than he has obtained from cod liver oil, or any other remedy. One of the most marked cases of benefit derived from this agent is in the person of Dr. Polk, the originator of the remedy. In 1872, he was apparently hopelessly affected by tuberculosis. Under the use of glycerite of kephaline, he sufficiently regained his health to accept (in 1874) a chair in the Pennsylvania College of Pharmacy, and is now in the enjoyment of perfect health.

The conclusions, after experience with the agent since August, 1872, in consumption—about 100 cases—is that glycerite of kephaline is almost specific in the first stage of consumption; superior to any other remedy in the second stage; and useless in the third stage.

Remedies for Sleeplessness.—"In a recent exchange [which one?], Fothergill, after discussion of the causes of sleeplessness, tabulates as follows the remedies which have been hitherto most highly recommended for this complaint:

1. Opium is indicated when sleeplessness is caused by pain; when irritation of the vascular system is present, aconite and antimony are to be combined with it.

2. Hyoscyamus is of service when sleeplessness depends on disease of the kidney.

3. Chloral hydrate is inefficacious in sleeplessness dependent on pain, though it is a hypnotic *par excellence* in the sleeplessness of fever, particularly in children. This remedy is injurious in ill humor, brain exhaustion, and in the sleeplessness of melancholy.

4. Bromide of potassium acts as a sedative either on the brain cells or the vessels of the brain; it is indicated in those cases where peripheral irritations are present, and is very beneficial in the sleeplessness which is the result of maladies of the pelvic organs.

5 Alcohol is a powerful hypnotic in those cases in which sleeplessness comes from sorrow, ill humor, and mental disturbances."—*Boston Medical and Surgical Journal.*

Chloroform vs. Ether.—It is singular that experience in different sections of the country should lead to such differences of choice of anæsthetic agents as exist North and South. The teachings of the Northern surgeons are in favor of ether as less dangerous, while Southern surgeons, as a rule, resort to chloroform as being equally safe and altogether preferable. We are struck with the obstinate persistence of the advocates of ether in continually quoting Richardson's and other tables of mortality from chloroform which bear no proper relation to facts. From the experience of physicians and surgeons now practising in this city of Richmond alone, we have been able to compute a table of more than 100,000 administrations of chloroform without a single death, while pure chloroform was used. One surgeon in the Confederate Hospitals here, however, informs us that during the war a methylated chloroform got into the hands of some surgeons and it is said that some deaths did occur from that chloroform, but from the use of that supply alone.

Dr. J. J. Chisolm, of Baltimore, in the June number, 1877, of the *Maryland Medical Journal*, is reported as stating "that in the daily use of chloroform, now extended through twenty-seven years of professional life, he had administered it to the extremes of age, to the strong and to the feeble, with every kind of organic disease of the various organs of the body, and had never seen an accident. He, therefore, sees no necessity for setting aside the best of anæsthetics for ether, which was equally nauseating, more distressing to take, and now that it was beginning to be used more freely, is found to be equally dangerous."

John Chiene, F. R. C. S., Lecturer on Surgery, Edinburg School of Medicine, etc., has a very excellent paper in many particulars on Chloroform in *The Practitioner*, January, 1877, from which we make the following extracts:

The present outcry against chloroform is the result of an imperfect understanding of (A) Its physiological action; (B) The proper method of administration; (C) The dangers which may accompany its use, and their treatment; (D) The dangers which follow its abuse, and their treatment.

(A.) *Its Physiological Action.*—Chloroform is, first, a stimulant; second, a sedative; when inhaled it passes into the blood and poisons *in a certain order* the nervous centres. Its effects may be classed: 1. Abolition of voluntary motion; 2. of sensation; 3. of reflex action; 4. stoppage of respiration; 5. stoppage of the heart's action.

Our object is to attain the first three effects, and to avoid the fourth and fifth. The great practical fact is this, that *the first three always precede the fourth and fifth.* When laryngeal obstruction occurs, respiration may cease from faulty or delayed treatment on the part of the administrator. The heart's action may cease from shock, too little chloroform having been given before commencing the operation. The action of the heart may also cease in consequence of engorgement occurring secondarily to a delay in the treatment of laryngeal obstruction. These dangers are preventible accidents which may occur during the administration; and are in no way to be confounded with stoppage of the respiration and heart's action directly due to a poisoning of the respiratory and cardiac ganglia by an overdose of the drug.

Chloroform is a *cumulative* poison; after a person is once fully under its influence, a very little more is required to place the patient in a dangerous condition.

Chloroform is also a *volatile* poison, and even after the respiratory and cardiac ganglia are affected, if the patient is kept alive for a time by artificial respiration, the effects of the drug will pass off, unless the overdose has been excessive.

(B.) *The Proper Method of Administration.*—Simple means are the best. A towel or handkerchief is better than any apparatus. It is a matter of no importance how much is poured on the towel, except as a matter of economy. The administrator has to give his entire attention to the effect of the drug. As in all drugs, so in chloroform, different patients require different doses in order to attain the proper effect. The administrator must use his brains, and have his catch-forceps attached to his coat. He must watch the *breathing* and the *appearance* of the patient. The sense of feeling of the hand between the towel and the mouth is the best guide to the breathing. The heaving of the chest has also to be watched. The heaving of the abdominal walls is deceptive, as this may be due to contractions

of the diaphragm, which may continue for some time without any air entering and being expelled from the chest. Voluntary stoppage of the breathing frequently occurs early in the administration. Experience will soon enable the administrator to understand this, and to distinguish it from stoppage of respiration, due to the action of the drug on the nervous centres which govern the muscles of respiration. The sense of hearing may also assist in enabling the administrator to judge of the breathing. In antiseptic surgery, the use of the steam spray, accompanied by a hissing noise, interferes with the sense of hearing; in such cases the surgeon must trust to the senses of touch and sight. If the breathing becomes shallow or irregular, accompanied by gasping or sighing, then the towel must be *at once* removed from the patient's face. When the breathing becomes deeply stertorous, then the patient has, as a rule, had sufficient; the towel must be at once removed. Stertorous breathing is not in itself an evidence of danger. The *appearance* of the patient's face is also to be watched. As long as the lips are red the blood is being properly aërated, the circulation and the heart's action are unaffected. If the patient becomes *livid*, or unnaturally *pallid*, then there is danger.

Tell the patient that he is to take long breaths. Give the drug slowly at first, in order to prevent a choking sensation. Do not let the towel rest on the face, because it is apt to cause blistering. After a time the patient struggles involuntarily: do not fight with him; guide his movements, and as the drug takes effect they will soon subside.

How are you to know that the patient has had enough? There are three signs, all of which should be made use of.

1. By touching the conjunctiva; if the patient does not contract his orbicularis palpebrarum, then he is generally sufficiently under the influence. Sometimes, however, this is not a certain sign; the action on the nervous centres is progressive; although sufficient for an operation in the region of the eye, the drug may not yet have affected the whole of the spinal cord, and reflex action in the limbs may not be abolished.

2. Muscular relaxation, judged of by raising the arm and seeing if it falls heavily by the side.

3 *Local* sensibility at the seat of the operation. This is to be estimated by the surgeon pinching the part to be operated on with a pair of artery-forceps.

These three signs are all useful, and experience will enable the administrator to estimate their proper value in each case. Take away the towel the *moment* the patient is under the influence. A very common mistake is to suppose that if the patient

is breathing, then all is right. When the breathing stops, then the patient is on the point of death.

No attention is to be paid to the pulse: it is the last thing that stops. When the stoppage of the heart's action is due to the drug, then the patient is dead. Fortunately the poison is a volatile one, and if from ignorance, too much has been given, interfering with the action of the heart, either directly by acting on the nervous centres which govern the heart's action, or indirectly by stoppage of the circulation, the heart may recover itself if the patient is kept alive by artificial respiration until the poison, in consequence of its volatility, is dissipated.

It is not necessary to use the stethoscope in order to test the propriety of giving chloroform. If there is heart disease, or weak action of the organ, then these are the very cases in which chloroform is most useful, because they are most liable to the occurrence of shock, which the drug prevents by abrogating sensibility.

(C.) *The dangers which may accompany its use and their treatment* may occur in any case, because the drug acts with much greater rapidity in some cases than in others. The frontier line between the abolition of sensation, voluntary motion, and reflex action, and stoppage of the circulation and heart's action, is often very indistinctly marked. In old people this is the case; in them the drug must be administered with the greatest caution. These dangers may be classed under four heads:

1. *The tongue falling back* and closing the glottis, in consequence of paralysis of the muscles which hold the tongue forwards. The signs of this are lividity of the face and shallow breathing, as the air does not enter and leave the chest in sufficient quantity. The patient is in the same state as if a piece of meat had stuck in the pharynx, closing the glottis. The piece of meat is his tongue.

2. *The glottis closing*, due to paralysis of the intrinsic muscles of the larynx. The signs of this are lividity and a crowing sound, as heard in a case of croup, acute laryngitis or laryngismus stridulus.

3. *Fainting.*—This is due to an imperfect supply of blood to the brain, the result of either the sitting posture during administration, as the dentist's chair, or to a naturally weak heart in the aged or prematurely aged person. The sign of this is unnatural pallor of the face, judged of more especially by the paleness of the lips. The faintness may be due also (at the commencement of the administration) to fear on the part of the patient. It may also be due to any cause which may give rise to faintness in general. In this case the chloroform has nothing

whatever to do with the faintness; it may be associated with, but in no way due to the chloroform. The faintness may also be due to want of confidence on the part of the administrator. He fears the drug, from ignorance of its physiological action. He commences the operation before the patient is sufficiently under the influence. The patient is then in a condition which renders him most liable to shock. He is unable to brace himself up to bear the pain; his nervous centres are in a semi paralyzed condition. The unfortunate result may follow, namely: imperfection or stoppage of the heart's action, followed by syncope.

4. *Vomiting.*—This is only dangerous if there is food in the stomach. The food passes into the pharynx, and may pass through the semi-paralyzed larynx and cause suffocation by passing into the bronchi. If the stomach is empty this danger cannot occur.

Treatment of these dangers: (1.) *The tongue falling back.*—The head is to be turned on one side in order that by its weight the tongue may pass to one side and the opening of the glottis may be free for the entrance and exit of air. If this does not *at once* effect the object, then the tongue must be removed from its dangerous position, and for the same reason that, if a person is choking from a piece of meat lying on the glottis, the proper treatment is to remove the obstruction. The best way to do this is to seize the tongue with the catch-forceps and pull it forwards, so that the tip of the tongue appears between the teeth.

(2.) *The closure of the glottis*, due to paralysis of the intrinsic muscles of the larynx. To remedy this danger the tongue must be pulled forcibly out of the mouth. By so doing the epiglottis is pulled forwards by stretching the ligaments which unite it to the tongue; the epiglottis, passing forwards, stretches the aryteno-epiglottidean ligaments, and separation of the vocal cords follows. The action here is purely mechanical, and was first explained to me by Dr. John Wyllie, who first described this effect of forcible traction on the tongue. (*Ed. Med. Journal*, September, 1866). This can be verified on the dead subject.

If these two dangers are not treated *at once*, the result is that respiration does not proceed, the blood is improperly aërated, the lungs become gorged, the heart becomes gorged, and the result is stoppage of the heart's action. If a rabbit is killed with chloroform and the chest opened, the heart will be found to be gorged with blood, and the contraction of the heart will be in abeyance; prick the heart with a needle, allow some blood to escape, and the contractions of the heart are re-established.

This experiment seems to show that if by striking the chest and by artificial respiration, the action of the heart is not quickly re-established, then bleeding from the external jugular vein should at once be resorted to. I have never yet been required to have recourse to this remedy, artifical respiration having been sufficient.

3. *Treatment of Fainting.*—(*a.*) *Preventive.*—Never give chloroform in the sitting posture. Never commence any operation, however trivial, until the patient is fully under the influence of the drug; it is far better not to give chloroform at all than to use it imperfectly.

(*b.*) *Curative.*—If it occurs as a result of a weak heart, or in consequence of an excessive loss of blood during the operation, or as a coincidence during the administration of the drug, then the head must be at once placed at a lower level than the body, the arms and legs must be raised to the vertical, or the patient may be held up by the heels, as recommended by M. Nelaton. The effect by all these ways is attained of restoring a sufficient supply of blood to the brain.

The good effects of Nelaton's practice are, in my opinion, of a twofold nature. 1st. By restoring the proper supply of blood to the brain in the most efficient and quickest manner. 2d. In many of the cases the danger may have been at the opening of the glottis, due to obstruction by the tongue; inverting the patient will at once remedy this by causing the tongue to fall forwards. It will also be useful in cases in which blood, in operations about the mouth and nasal cavities, has passed into the bronchi, or in cases in which vomited matter has passed into the larynx, the foreign body being removed by inversion, as Brunel removed the half-sovereign from his bronchial tubes.

4. *Treatment of Vomiting.*—Do not give any solid food for four hours before the operation. In railway accidents and other sudden injuries in which it is necessary to give chloroform, the greatest care must be taken; if vomiting occurs during the administration, turn the patient on his side in order to allow the vomited matter to escape from the mouth, and prevent any regurgitation into the bronchial tubes.

When the act of vomiting takes place, the stomach being empty, then the administration of more chloroform is required, in order to stop the abnormal contractions of the muscular walls of the stomach. There is in such a case no danger from vomited matter passing into the larynx.

(D.) *The dangers which accompany its abuse and their treatment.*—If an overdose of chloroform is administered, the nervous centres which rule the muscles of respiration are poisoned;

the treatment required is to pull the tongue forwards in order to allow air to enter or leave the chest by artificial respiration. *It is a volatile poison, and perseverance in artificial respiration must be continued until the volatile poison passes away.* A case recorded by Dr. J. J. Brown in the *Edinburg Medical Journal* (Nov., 1874) well illustrates this important fact. By artificial respiration kept up continuously for 2¾ hours, he saved a patient in whom complete paralysis of the respiratory ganglia had occurred, but the cardiac ganglia were affected. The case also shows that the respiratory ganglia are poisoned before the cardiac ganglia. When the overdose is excessive, then the heart's action is interfered with: by artificial respiration, striking the chest-wall with a wet towel, and the use of the galvanic battery, it must, if possible, be restored.

New Operation for Excision of the Knee-Joint.—The May number, 1877, of the *New Orleans Medical and Surgical Journal* quotes a paper from the *British Medical Journal* describing a new operation for excision of the knee-joint which seems to have some advantages. The paper is by Wm. Knight Treves, F. R. C. S., Surgeon to the National Hospital for Scrofula, Margate.

The objects of Treves' operation are to leave the tissues in front of the joint uninjured, to preserve the natural covering of the joint, and to keep intact the extensor tendon with its attachments. The bones are sawn *in situ.*

1. Make a semi-lunar incision about three inches long on each side of the joint, the lowest point of each incision being thoroughly dependent for the exit of pus or serum.

2. Divide the lateral ligaments on each side, and reflect the tissues till the synovial cavity in front is well opened. Divide any adhesions in front. Pass a wide director behind the joint in front of the posterior ligament, and divide with a narrow bistoury the crucial ligaments and any adhesions between the bones.

3. Insert a metal retractor in front of the bones to secure from injury the tissues in front, and the skin and tissues loosened from the sides, while the bones are being sawn. The blade of a Butcher's saw instead of a chain saw is passed behind the joint; and this being connected with its frame, a thin slice is sawn from the joint ends of each bone. The sawn surface of this slice is the exact counterpart of the surface left behind; and if on examination, it appears to be healthy, pass on to the patella, which is left, if healthy, or sliced if its cartilage be ulcerated.

The following are the chief advantages claimed for this operation:

1. Decided improvement in the after appearance of the limb. The front view shows little difference from the other limb.

2. Greatly increased power of extension. After ordinary excision, extension is often feeble from the divided and shortened extensor tendon; the leg is inclined to drag, and the patient catches his toe in walking. With Treves' operation, the patient can lift his leg even before union is firm, and he gets increased advantage from the additional power and handiness of the limb.

3. The extensor tendon being still attached to the tibia in front, whilst the posterior ligament is intact behind, the bones are not so loose, and the tibia is not so likely to become displaced.

4. This mode of operation partakes of the nature of a subcutaneous operation. The sawn surfaces are still left under their natural covering; they are not exposed under an extensive wound, which will sometimes gape in spite of care; but, being well protected, they unite, Dr. T. believes, more kindly and readily than with the usual operation. This is, after a little practice, a very easy operation.

Treatment of Chronic Chills, and Enlarged and Indurated Liver and Spleen.—Dr. Q. C. Smith, of Cloverdale, Cal., writes to the *New Orleans Medical and Surgical Journal*, May, 1877, that during his residence in the lower Mississippi River Valley, he found iodide of potassium, in fifteen to thirty grain doses three times daily to be the most efficient remedy for the conditions mentioned. He gave it continuously for several weeks, and in obstinate cases for two or three months; but he allowed intermissions of four or six days at the end of every two weeks. For keeping the bowels soluble,

℞. Extract. belladonnæ,
Extract. nucis vomic..... $\overline{aa}$ gr. j.
Pulv. ipecac..... gr. ij.
Aloes, (socotrin)..... gr. xvi.

Misce. Make 8 pills. S: One pill, one to three times daily.

In addition, painting (as often as the skin would allow) over the regions of the spleen and liver, with a strong ethereal camphorated tincture of iodine was often followed by good results.

Dr. Smith found the extract of cinchona much better than quinine for the relief of malarious diseases. He used the form called amorphous quinine in pills, and combined muriate of ammonia and solu. extract buchu with it. A very common recipe was

℞. Potas. iodid.,
Pulv. cinchon..... $\overline{aa}$ ℥i.
Spts. frumenti..... ⊙i. Misce.

S: Tablespoonful three times daily just after meals.

This amount generally prevented a recurrence of "chills" for the season, and the patient grew strong and hearty, with clear skin, and would remain all right till the following autumn at least.

Ingluvin.—Dr. A. F. Shelly, of Philadelphia, informs the editor of the *Medical and Surgical Reporter*, June 2d, 1877, that a proprietary remedy being on the market under the name of "Digestin," he has adopted the appellation *Ingluvin* for the preparation which he described under the name of digestin in his journal, February 3d, 1877.

Ingluvin is obtained from the gizzard of the domestic fowl (chicken), and is a specific for vomiting of pregnancy. Dr. S. has used the remedy for twenty-five years without failure. It is also the most powerful and reliable remedy for dyspepsia and sick stomach, due to debility of the organ. It is useful in all cases where pepsin and pancreatin are indicated. In complicated gastric affections, such as inflammation, gastralgia, pyrosis, etc., it may be combined with subnitrate of bismuth and opiates; and in diarrhœa and cholera infantum with vegetable or mineral astringents.

Dr. E. Wallace, Professor in the Jefferson Medical College, tried ingluvin in 9 cases of vomiting of pregnancy, and cured 6, palliated 2, and in the case of failure the remedy was not taken as directed. In 7 cases of sick stomach due to chronic inflammation of the uterus, 5 were cured, and 2 remained doubtful. Ingluvin was the only remedy that relieved a case of very obstinate sick stomach caused by an irreducible hernia.

The dose for an adult is from five to ten grains of the powder—even more in very obstinate cases; one to five grains for children. Dr. S. administers it in a spoonful of water or tea, or strewn upon a piece of bread and covered over with a little butter. It is, however, nearly tasteless. In dyspepsia and vomiting of pregnancy, Dr. S. gives it a half hour or so before each meal; in other stomach or bowel affections, every two or four hours.

Dr. S. first obtained ingluvin by pulverizing the lining membrane of the gizzard, but this is very troublesome. Messrs. Wm. R. Warner & Co., of Philadelphia, now prepare the article, the purity of which, as also its good effects, are attested by Dr. Shelly.

Mineral Water Supplanting Alcoholic Drinks.—Dr. F. D. Clum, of Saugerties, N. Y., says, in the *Louisville Medical News*, June 9th, 1877: A spring, with water of the peculiar characteristic odor of sulphuretted hydrogen gas, has lately been dis-

covered on the farm of Mr. Josiah Myer, of Saugerties, New York. All who choose have the free use of it, and several inebriates in the vicinity positively affirm that it is their grand panacea. They have discovered something which, as they express it, "is next to a never-exhausting fountain of whisky"; for when the water is moderately used it is a decided preventive of their almost insatiable desire for alcoholic drinks. As there is no enthusiastic hotel proprietor to surround it with an atmosphere of quackery, and as it has after a year's trial been found to supplant the habitual use of intoxicating and demoralizing agents, it certainly is a great boon to the community. Sulphur in the form of sulphuretted hydrogen gas, with which the water is largely impregnated, is the most important ingredient; and the nervous stimulation is doubtless partly imaginary and partly owing to the sulphuretted hydrogen gas and the alterative influence of the water upon the organism.

Treatment of Insanity.—The London correspondent of the Philadelphia *Medical Times*, June 9th, 1877, gives a most interesting statement of the medical measures adopted in the West Riding Asylum, which appear to be of great practical value to the general practitioner as well as to the specialist. He says:

The general health is invariably attended to scrupulously. Fresh air, good food, and clean raiment are supplemented by tonics, hæmatics and sedatives. For the control of mania, the succus conii has been tried, with but doubtful results. Bromide of potassium ℥ss, with tinct. of cannabis indica ℥j, is very useful in cases of excitement, especially with progressive softening after a clot, while chloral (℥ss to ℥j) is excellent in the forms of excitement of an epileptic nature. Morphia, in half-grain doses, is found the best agent in mania a potu; while bromide of potassium ℥j and liq. ergotæ ℥iij is the favorite combination in chronic epileptic excitement. The excitement of senile dementia is found to be intractable, and the treatment turns on the peculiarities of each case. In excitement associated with a febrile condition, twenty-minim doses of tincture of digitalis every three hours, night and day, are found to be very efficacious. This treatment seems especially suited to cases of sub-acute cerebritis, where great motor impairment and dementia accompany and succeed outbursts of fury. Mustard packing is rarely resorted to, but at times produces excellent results. With these measures are combined a generous diet, and attention to any causes of irritation or excitement, as masturbation, etc.

In melancholia of a hypochondriacal nature, morphia, pushed to one-grain doses, with sulphate of magnesia, has been found to

be the most successful practice. In ordinary cases of melancholia, belladonna has produced good results frequently; at times the combination of belladonna with morphia has seemed more satisfactory.

In general paralysis, the patients are liable to outbreaks of the most ungovernable character, in which they use excessive violence, and it is with such patients that post-mortem discoveries of several broken ribs are associated. Their violence must be met by some form of restraint, and, as mechanical restraint has been abandoned, of course human control has to be substituted, and in the tremendous struggles which follow the patient is sometimes injured severely, without any malice on the part of the attendant. For the control of such outbursts, at one time tartar emetic in scruple doses was given, with the results of immediate prostration, but too often a pustular inflammation of the stomach was the ulterior consequence, of which, not rarely, the patient died. Noting the muscular prostration which experimental research had demonstrated to be the result of a dose of the calabar bean, Dr. Crichton Browne, (the medical superintendent) used this agent during the periods of excitement, with excellent results. Not only were these attacks of excitement and furor greatly mollified thereby, but, in a number of cases, the general excitability was lowered, and some improvement even inaugurated. The depressant action of chloral is also of great service in controlling such cases. In some cases it becomes desirable to shave the scalp and rub in croton oil, a measure indicated in the most intense and otherwise intractable forms. In epilepsy, chloral is found very useful, while inhalations of nitrite of amyl ward off the attacks and greatly reduce them in number. Where epilepsy is the result of peripheral excitement, as of the genitals at the climacteric period, at puberty, or occurs with teething, the bromide of potassium is most useful, just as it is in similar affections of the sane. In acute dementia, tonics, warm clothing, exercise and labor, with extra diet and cod liver oil, are found of great service. Here, too, it is necessary to watch the habits of the patient, and prevent masturbation. Where it is consecutive to mania, this last measure often leads to surprising results. Phosphorus has not been found to be of much service in these cases.

In the sixth volume of Reports, just published, is a paper on *Hyoscyamine, and its Utility in the Treatment of some Diseases of the Insane*, by Dr. Robert Lawson, a man of whom more will be heard by and by. He has found that hyoscyamine induces a certain amount of intellectual excitement, combined with muscular powerlessness, which renders it admirably adapted to those

cases where the furor is as much badness as insanity. In these cases the muscular powerlessness induced by it has an excellent moral effect upon the patient. The sedative effect of henbane upon the genito-urinary organs is well known, and Dr. Lawson has found the extract of especial service in cases of passive retention of urine in general paralytics. One of the greatest nuisances in asylums, as in jails, is the tendency of certain patients to tear up their clothing, bedding, etc. This is quite as much malice as madness, and it is found that a dose of three-quarters of a grain of hyoscyamine in such cases does immediate good, and acts as an effective lesson for some time after.

Book Notices, &c.

The Cure of Rupture; also, of Varicocele and Hydrocele by New Methods. By GEORGE HEATON, M. D., Member Mass. Med. Society; Fellow of the Westminster and London Medical Societies, etc. Arranged and Edited by J. HENRY DAVENPORT, A. M., M. D., Harv. Boston: H. O. Houghton & Co., 1877. 12 mo. Pp. 196. Price $1.50. (For sale by Messrs. Woodhouse & Parham, Richmond).

The first 152 pages of this little book are taken up with a consideration of hernia in its various forms. The principal object, however, is to give prominence to a plan of treatment for the radical cure of the trouble, original with the author, which has proved remarkably successful, and which has never yet been attended by a fatal result. He styles his operation "the method of tendinous irritation," which "may be briefly described as consisting of a mild irritation of those portions of fibrous tissue lying directly in contact with the exterior of the neck of the hernial sac, thickening and consolidating their substance, and effecting a contraction of the openings."

Want of space does not permit a detail of the steps in his operation. In general terms, however, it may be said that after the perfect reduction of the hernia, quickly penetrate with a peculiar hypodermic syringe the tissues so as to enter the canal at once. The surgeon having satisfied himself that the beak of his instrument is in the canal, he then deposits about ten minims of the liquid irritant (consisting of Thayer's fluid extract of quercus alba, prepared in vacuo, ℥ss, and of the solid extract of quercus alba, about grs. xiv—add about a grain of sulphate of morphia to ℥j of the preparation). "Particular care should be taken that the intercolumnar or arciform fibres, and the inner

edges of the external ring are wet with the irritant" "After the second week, the patient can generally be allowed to return to his usual avocation."

"The solid method" consists of substituting for the liquid injection, a thick paste or semi-fluid mixture prepared by triturating the solid with the fluid extract of quercus alba until we obtain a viscous paste so soft as to be easily spread over the fibrous surfaces." Its advantage is that "it can be smeared over the fibrous surfaces with less risk of irritating other parts than can the liquid injection."

"A repetition of the operation is performed in actual practice in from one-third to one-half of all the cases presented."

We make these extracts in order to give a general idea of the method proposed, etc. The author has operated "many hundreds" of times, and concludes his chapter with the remark that his lack of fatal cases "is more than can be said of any of the other operations which have been proposed for the cure of hernia." Without saying so in precise language, however, he leaves us to the inference that in common with other surgeons, he has had cases of failure of *cure*.

Our author is evidently unacquainted with the equally as remarkably good results of an operation proposed by Dr. Greensville Dowell. In a series of about 100 cases operated on by Dr. Dowell, "no deaths have occurred from the operation."* The operation itself as proposed by Dr. Dowell is, too, equally as simple, and, theoretically considered, must result in as few failures of cure.

In regard to trusses, our author seems to be also unacquainted with some of the real improvements in construction. The experience of physicians throughout this section of country especially would not sustain the remark that "No contrivance has yet been invented to successfully supplant the [abominable] steel spring girdle." The "Ayres' Hernial Truss" manufactured in this city, secures the two important points demanded by Dr. Heaton. It affords, first, efficient retention of the hernia; and, secondly, it accomplishes this with *exceedingly slight* inconvenience to the patient. Many cases of *cure* of rupture by this truss are known to us. Continued experience and observation only enables us to repeat most emphatically what we said three years ago, that "in theoretical accuracy or in practical results we know of no truss that is to be compared with Ayres' Hernial Truss." A single fact may be mentioned as somewhat indicative of the

* Dowell on *Hernia*. Page 68. Published by D. G. Brinton, Philadelphia, 1876.

merits here awarded to it, namely: that during the past three or four years, we have scarcely heard of the performance of a surgical operation in this section for hernia. But it is proper to add that practitioners in this city have the benefit of securing the personal services of Mr. Ayres in the application of his truss.

The author's operation for varicocele "consists in ligations of the enlarged vein of the cord, in two or more places, by silver threads through openings so minute that the ligatures may be said to be practically subcutaneous." He has performed the operation "in many hundreds of cases," and it "is of so trivial a character as to be attended with but little pain at the time of operation and but slight annoyance afterwards."

The chapter on hydrocele is written to call especial attention to the value of red precipitate. "This powder readily adheres to a moistened probe which can then be thrust through the canula several times, introducing a certain amount of the powder within the tunic." The irritation thus caused has almost invariably resulted in a radical cure, although the immediate pain caused by this irritant is excessive. Dr. Heaton's attention was first called to the use of this drug in 1850 by Mr. Lloyd, of St. Bartholomew's Hospital.

A great many valuable suggestions are contained in this little hand-book, and will serve an excellent purpose if found in every medical library. The letter-press, of course, is most handsomely executed, coming as it does, from the "Riverside Press."

Transactions of the American Gynæcological Society. Vol. 1. For the year 1876. Boston: H. O. Houghton & Co., 1877. 8 vo. Pp. 396. Price $5. (For sale by Messrs. Woodhouse & Parham, Richmond).

In our November number, 1876, we gave so full an abstract report of the proceedings that a further notice seems now not specially called for, as we must economize space. Besides, the book is now obtainable, and all who are paying anything like special attention to gynæcological subjects should begin their subscriptions with this first volume. We make a full extract in this number from Dr. Jenks' contribution regarding viburnum prunifolium.

We are requested to say by the Secretary, Dr. James R. Chadwick, of Boston, that authors of books, pamphlets, etc., upon gynecological or obstetric subjects, in all languages, are requested to send such to the Secretary, in order to insure the insertion of their titles in the current Bibliographical Index, which will be published each year in the Transactions.

Subscriptions for *Gynecological Transactions, Vol. II*, which will appear in September, 1877, will be received at the reduced rate of $1.00, by H. O. Houghton & Co., Cambridge, Mass.

Solution and Absorption of Medicines is the title of a paper of interest read before Tri-States Medical Society, and published in the *American Medical Bi-Weekly*, by Dr. J. W. Compton, Professor of Materia Medica and Therapeutics in the Medical College of Evansville, Ind. It seeks to point out the "best means of securing the good effects of medicines in the cure of disease." "Some of the causes which may hinder the solution of medicines in the stomach," are pointed out. The author urges that liquids or substances easily liquefied should be prescribed. But he does not allude to the great value of hypodermic medication in the very class of cases of which he speaks.

Transactions of the Nebraska State Medical Society at its 6th, 7th and 8th Sessions. Pp. 221.

This is an exceedingly interesting volume and contains many instructive papers and reports of cases, but we have not the space to give to their analyses. Our purpose is simply to call attention to a new feature, which strikes us as being useful. This Society has a Committee on Foreign Correspondence which undertakes to present "a synopsis of the Transactions of those medical societies with which we are in correspondence and fraternal relations." The report before us occupies about 80 pages, and 36 volumes of Transactions. Every paper in each of these 36 volumes is remarked upon, and besides that, all peculiarities of organization or resolutions of *general* interest, etc., are mentioned. Thus the library of Transactions, annually received, is made valuable to all members. As it now is, the Secretaries of most Societies receive exchange Transactions, hastily run their eyes over the title page, &c., make a note of the receipt of the volumes in their memoranda-books to be mentioned in their next annual reports, and then lay the Transactions upon the library shelves—there to become burried in the dust. The plan adopted by our Nebraska friends makes these exchanges valuable to all members of other Societies. Let each Society consider the propriety of adopting some such method. Much useful information is contained in these annual volumes, but it is lost to the general profession under the present usual system of dealing with the volumes as issued.

We have been trying to find room for notice of the many pamphlets, reprints, &c., received, and have prepared notices of some of them, but as we can see no early prospect of finding

space in which to give them due consideration, we shall have to content ourselves by merely giving their titles.

Transactions of the Minnesota State Medical Society, 1876. Pp. 157. Dr. Chas. E. Smith, St. Paul, Secretary.

Transactions of the Mississippi State Medical Society, 1876. Pp. 102. Dr. Wirt Johnson, Jackson, Secretary.

Transactions of the Colorado State Medical Society, 1876. Pp. 94. Dr. Chas. Denison, Denver. Secretary.

Transactions of the Medical and Chirurgical Faculty of Maryland, 1876. Pp. 165. Dr. W. G. Regester, Baltimore, Secretary.

Transactions of the New Hampshire Medical Society, 1876. Pp. 173. Dr. Granville P. Conn, Concord, Secretary.

Transactions of the Medical Society of the State of West Virginia, 1876. (See Proceedings of Session of 1876 in this issue for recently elected officers, etc.)

Two Cases of Morphœa, with remarks on the Disease and its Differential Diagnosis. Pp. 6. By L. Duncan Bulkley, A. M., M. D., New York. Also, *Nomanclature and Classification of Diseases of the Skin.* Pp. 10. By same author.

Discovery of Modern Anœsthesia. A critique. Pp. 15. By H. P. Stearns, A. M., M. D., Hartford, Conn.

Relations of Ancient Medicines to Gynœcology. Pp. 22. By Edward W. Jenks, M. D., Detroit, Mich.

Milk Sickness. Pp. 21. W. H. Philips, M. D., Kenton, O.

Address of the President of Michigan State Medical Society. Pp. 16. Dr. Wm. Brodie, Detroit.

Sympathetic Ophthalmia. Pp. 28. By George E. Frothingham, M. D., Ann Arbor, Mich.

Recherches Experimentales Sur le Role Physiologique et Therapeutique de la Pancréatine Par Th. Defresne, Paris, 1875. Pp. 103.

Vaginal Ovariotomy. Pp. 7. By Clifton E. Wing, M. D., Boston; also, *The Use of Uterine Supporters.* Pp. 8. By same author.

Considerations in Relation to Diseases of the Hip Joint. Pp. 8. By David Prince, M. D., Jacksonville, Ill.

Exercise in Health and Disease. Pp. 14. By T. A. Foster, M. D., Portland, Me.

Report of the Committee on *Medical Education*, made to the Medical Society of the State of California. Pp. 20. By Jos. F. Montgomery, M. D., Sacramento.

Report of the Committee on *State Medicine and Public Hygiene* made to the South Carolina Medical Association. Pp. 77. By Manning Simons, M. D., Charleston, S. C.

Occlusion and Dilatation of Lymph Channels. Pp. 84. By Samuel C. Busey, M. D., Washington, D. C.; also, *Address in Obstetrics and Diseases of Women and Children* to American Medical Association. Pp. 33. By same author; also, *The Gathering, Packing, Transportation and Sale of Fresh Vegetables and Fruits:* Their Chemical Constitution and Nutritive Value, Competent Inspection and Free Markets for Producers. Pp. 22. By same author.

Restriction and Preventive of Scarlet Fever. Pp. 8. Document issued by State Board of Health of Michigan.

Report on the New or Fifth Decennial Revision of the United States Pharmacopœia to the Medical Society of the State of New York. Pp. 25. By Edward R. Squibb, M. D., New York; also, *The American Medical Association and the Pharmacopœia of the United States of America.* Pp. 59. By same author; also, Note on *the Administration of Phosphorous.* Pp. 15. By same author.

Specialism in Medicine. Pp. 10. By E. D. Forée, M. D., Louisville, Ky.

Blood-Letting in Puerperal Eclampsia: Pathology and Therapeutics; the old and the new. Pp. 48. By Henry Fraser Campbell, M. D., Augusta, Ga. (An excellent paper—reprinted from August number, 1876, *American Journal of Obstetrics.*

Pneumatic Pressure, and the Genu Pectoral Posture in the Reduction of Uterine Luxations. Pp. 14. By A. Sibley Campbell, M. D., Augusta, Ga.; also, *Full-Term Extra-Uterine Gestation of the Tubo-Ovarian Form.* Pp. 20. By same author.

Resume of the Transactions of the International Medical Congress at Brussels, 1875. Pp. 12. By Geo. W. Wells, M. D., New York.

A Case of Ovariotomy. Pp. 12. By David Prince, M. D., Jacksonville, Ill.

Clinical Lecture on the *Treatment of Incipient Stricture by Otis's Operation.* By Mr. Berkeley Hill; together with *Explanatory Remarks on the Treatment of Stricture and Gleet.* By Fessenden N. Otis, M. D., New York; also, on *Stricture of Male Urethra—Its Radical Cure.* Pp. 36. By same author.

What is the Nature and Purpose of the Fever Process in Human Bodies? Pp. 7. By Z. Collins McElroy, M. D., Zanesville, O.

Address of the President of the Tri-States Medical Society. By Joseph W. Thompson, M. D., Paducah, Ky.

Relations of Medicine to Modern Unbelief—a Valedictory Address. By Richard O. Cowling, M. D., Louisville, Ky.

The Climatotherapy of, and the American Mountain Sanitarium for Consumption. By Stanford E. Chaillé, A. M., M. D., New Orleans.

Sexual Debility and Impotence resulting from Stricture and Inflammation of the Curved Portion of the Urethra, with special reference to Masturbation as an Exciting Cause of Stricture. Pp. 9. By Samuel Gross, A. M., M. D., Philadelphia.

Masturbation and Hysteria in Young Children. Pp. 32. By A. Jacobi, M. D., New York.

Annual Address before Society of Alumni of the Medical Department of the University of Pennsylvania. By Meredith Clymer, M. D., New York.

Operation for Vesico-Vaginal Fistula: a Comparison of the Methods of Operation of Dr. Bozeman and Professor Simon. Pp. 47. Illustrated. By A. C. Bernays, M. D., St. Louis, Mo.

Argument in Favor of a Contagious Disease Act: Its present State. Pp. 32. By E. T. Easley, M, D., Little Rock, Ark. (This is a

very interesting paper, reprinted from the *R. and L. Med. Jour.*, October, 1876).

Contribution to the Study of the *Transmission of Syphilis.* Pp. 15. By R. W. Taylor, M. D., New York.

History of Spontaneous Generation. Pp. 30. By Edward S. Dunster, M. D., Ann Arbor, Mich.

Reply of Dr. Frothingham to a Member of the Michigan State Medical Society on the subject of *Homœopathy in the University of Michigan.* Pp. 19.

Report on Pott's Disease, or Caries of the Spine, Treated by Extension, and the Plaster-of-Paris Bandage. Pp. 68. By Lewis A. Sayre, M. D., New York.

Case of Double Optic Neuritis without Cerebral Tumor. Pp. 13. By J. Hughlings Jackson, England.

Extent of Swamp Lands in United States, and their Reclamation as a Sanitary and Economic Measure. Pp. 40. By Joseph M. Toner, M. D., Washington, D. C.

Report on the Death Rate of Each Sex in Michigan, and a Comparison with Dr. Farr's Life Tables of Healthy Districts of England; with a Statement regarding *Infant Mortality in Michigan.* Pp. 16 By Henry B. Baker, M. D., Lansing, Mich.

Influence of City Life and Occupations in Developing Pulmonary Consumption. Pp. 20. By F. Donaldson, M. D. Baltimore, Md.

Phthisis: Its Causes, Diagnosis and Treatment. Pp. 24. By Wm. Porter, M. D., St. Louis.

Medical Legislation—President's Address before Sacramento Society for Medical Improvement. By Ira E. Oatman, M. D.

Plastic Dressing in Fractures of the Lower Extremity. A Clinical Lecture by David W. Yandell, M. D., Louisville, Ky.

In addition to the above, we have received a large number of Official Reports from Hospitals, Asylums, Boards of Health, College Catalogues, Health Resorts, etc., etc., for the more detailed mention of which we have no space.

Editorial.

The American Medical College Association was organized in Chicago June 4th, 1877. Because of the general interest which has been manifested throughout the country in the result of this organization, we copy from the *American Medical Bi-Weekly* the ARTICLES OF CONFEDERATION, (to be subscribed and conformed to by all the Colleges of the Association).

ART. I. OF THE FACULTY.—The medical members of the Faculty must be *regular* graduates or licentiates and practitioners of medicine, in good standing, using the word "regular" in the sense commonly understood in the medical profession.

ART. II. TUITION.—Sec. 1. The scheme of tuition shall provide for a yearly systematic course of instruction covering the general topics of Anatomy, including dissections, Physiology, Chemistry, Materia Medica and Therapeutics, Obstetrics, Surgery, Pathology and Practice of Medicine. The collegiate session, wherein this course is given, shall be understood as the "regular" session.

Sec. 2. Said Regular Session shall not be less than twenty weeks in duration. This section to go in force at and after the Session 1879–80.

Sec. 3. Not more than one regular session, counting the regular session as one of the two courses of instruction required for graduation, shall be held in the same year.

ART. III. REQUIREMENTS FOR GRADUATION.—No person, whether a graduate in medicine or not, shall be given a diploma of "Doctor of Medicine" who shall not have fulfilled the following requirements, *except* as hereinafter provided for in Art. IV:

1. He must produce satisfactory evidence of good moral character, and of having attained the age of twenty-one years.

2. He must file a satisfactory certificate of having studied medicine for at least three years under a *regular* graduate, or licentiate and practitioner of medicine, in good standing, using the word "regular" in the sense commonly understood in the medical profession. No candidate shall be eligible for final examination for graduation unless his term of three years shall have been completed, or shall expire at a date not later than three months after the close of the final examination. This clause to take effect at and after the session of 1879–80.

3. He must file the proper official evidence that, during the above-mentioned three years, he has matriculated at some affiliated college, or colleges, for two regular sessions, and in the course of the same (except as provided in 4), has attended two full courses of instruction on the seven topics mentioned in Article II. But the *latter*, at least, of the two full courses must have been attended at the college issuing the diploma. No two consecutive courses of instruction shall be held as satisfying the above requirement unless the time between the beginning of the first course and the end of the second is greater than fifteen months.

4. In case a college shall adopt a systematic graduated scheme of tuition, attendance on the whole of the same shall be equivalent to the requirements mentioned in 3, *provided* such scheme includes instructian in the seven topics mentioned in Article II, and requires attendance upon at least two yearly regular Collegiate Sessions of not less than twenty weeks' duration each.

5. The candidate must have passed a personal examination before the Faculty on all seven of the branches of medicine mentioned in Article II.

6. He must have paid in full all college dues, including the graduation fees.

ART. IV. HONORARY DEGREES.—An honorary degree of "Doctor of Medicine" may be granted in number not exceeding one yearly, to distinguished physicians or scientific men of over forty years of age. But in such case the diploma shall bear across its face the word "Honorary" in conspicuous characters, and the same word shall always be appended to the name of the recipient in all lists of graduates.

ART. V. FEES.—Sec. 1. All fees shall be paid in lawful money, and no promissary or promises to pay shall be accepted in lieu of cash for payment of fees.

Sec. 2. No ticket or other certificate of attendance upon college exercises shall be issued to any attendent until the dues for the same shall have been fully paid.

Sec. 3. The established fees for the exercises of the regular session, except the matriculation fee, graduation fee, fee for dissections, may be reduced not more than one-half to graduates of other affiliated colleges of less than three years' standing, and to undergraduates of the same who have already attended two full courses of the instruction of the regular session.

Sec. 4. The same fee may be remitted altogether to a college's own alumni, to graduates of other affiliated colleges of three years' standing – the three years dating from the time of graduation and ending at the close of the regular session for which the tickets are given—to undergraduates who have already attended two full courses of the instruction of the regular session, the latter of which at least shall have been in the college making the remission, and to theological students when not candidates for a diploma.

Sec. 5. Under no circumstances whatever other than the above shall the Faculties, or any members of the same, grant, upon their own authority, any remissions or reductions of established fees. And it is distinctly understood and agreed that the Faculties will discountenance and oppose the authorizing by governing Boards of the admission of individual students upon other than the regularly established charges for their grade.

Sec. 6. Remission or reduction of fees for other exercises than those of the regular session, return to a student of any moneys after payment of fees, or an appropriation of funds of the college for payment of any student's fees, or part thereof, shall be deemed violation of the provisions of this article in regard to remission or reduction of fees.

ART. VI. RECOGNITION OF OTHER COLLEGES.—No college shall admit to the privileges accorded in Articles III and V the students or graduates of any college which, during any period of the student's or graduate's pupilage, shall have been excluded from the list of affiliated colleges recognized by the Associatian.

ART. VII. AMENDMENTS.—Amendments to these Articles shall be proposed and adopted in the manner prescribed for amendments to the Constitution.

The following is a list of the twenty-five "Confederated" Colleges in this Association: Jefferson Medical College; College of Physicians and Surgeons, New York; Medical Department of the University of Louisville; Hospital Medical College of Louisville; Medical Department Iowa State University; Chicago Medical College; Medical Department University of Wooster, Ohio; Cleveland Medical College; Detroit Medical College; Starling Medical College; Medical Department, University of Vermont; Medical Department of the Nashville and Vanderbilt Universities; Missouri Medical College, St. Louis; Dartmouth Medical College, Hanover; Kansas City College of Physicians and Surgeons; Miama Medical College of Cincinnati, Ohio; Louisville Medical College, Kentucky; Department of Medicine and Surgery of the University of Michigan; Medical Department of the University of Louisiana; Rush Medical College; Indiana Medical College; Medical College of Ft. Wayne; The Woman's Hospital Medical College of Chicago.

It was resolved that each of the Confederated Colleges shall publish, with the articles of confederation, the list of colleges within the Association in its next annual catalogue and circulars.

Each College within the Association is to pay $5 initiation assessment.

It was also resolved that the beneficiary provision in all colleges shall be limited to five per cent.

The "Ad Eunden Degree" will no longer be issued. There is another list of what is termed "affiliated colleges"; that is colleges which, though not members of the Regular Association of American Medical Colleges, work in recognition of the same requirements and standard. In this list of affiliated colleges will be found the following Institutions: Harvard; University of Pennsylvania; Bellevue; University of New York; Kentucky School of Medicine; the Medical Colleges of Virginia, and all other medical colleges which conform to the following of the articles of confederation herewith published; article i; sections 1 and 3 of article ii; article iii, and article v.

The following are the officers of the Association; Professor J. B. Biddle, Philadelphia, President; Professor N. S. Davis,

Chicago, Vice-President; Professor Leartus Connor, Detroit, Secretary and Treasurer.

A review of the articles of confederation will show a great many loop-holes through which unprincipled colleges may pass without violation of the *letter* of the law; on the other hand, too great stringency has been laid on certain points regarding which more latitude should have been allowed. A heap of oil will be required to make this machine work smoothly—without jarring friction. That is our opinion, but as we are not one of the colleges, nor the organ of any in or out of the Association, we are content to let the Association alone.

The Discoverer of Anæsthesia.—Unless evidence equally as strong as that presented in the article in our last (May) issue by Dr. J. Marion Sims can be brought forward in support of the claims of some predecessor not yet named, Dr. Crawford W. Long, now of Athens, Ga., must hereafter be recognized as *the discoverer* of surgical anæsthesia. The testimony in corroboration is cumulative; fortunately there are living witnesses.

Just before the issue of the May number of the *Monthly* (which was delayed more than two weeks beyond its usual time of issue), we received a letter from Dr. Sims stating that he had other facts; but it was too late to make any additions. We are glad to see, however, that the June number, 1877, of the *Richmond and Louisville Medical Journal*, in republishing the article in full as it appeared in the *Monthly*, adds the following letter to Dr. Sims, dated May 5th, 1877, from Dr. James B. Carlton, now of Athens, Ga., and President of the local Board of Health:

"In the month of March, 1846, while spending some time in Jackson county, Ga., with my brother-in-law, D. R. Lyle, my oldest and then only child was taken very ill, and I sent for C. W. Long, who was then residing in Jefferson, Jackson county, about ten miles from the residence of Mr. Lyle. During the time Dr. Long was visiting my child, he spoke openly and freely to me of the use of sulphuric ether by inhalation to prevent pain in surgical operation. He spoke of having removed tumors and of having performed other minor operations upon patients in a state of anæsthesia from inhaling ether.

"Dr. Long made no effort to conceal his operation from the profession; he made no request that I should not mention the

subject, or that I should not use ether as an anæsthetic in surgical operations. On the contrary, he advised me to try it, and upon my return home, acting upon the information given me by Dr. Long, I gave the ether successfully to a negro boy for the extraction of a tooth. This operation was previous to the date when Drs. Jackson and Morton claim to have discovered anæsthesia.

"Of the time of the conversation in which Dr. Long informed me of his discovery, I cannot be mistaken. On conferring with Mrs. Carlton, I am sure that it was in the month of March, 1846. Facts connected with the age of the child at the time of illness and other circumstances, make me positive as to the time."

Abingdon Academy of Medicine.—At the annual meeting in May, the following officers were elected: Dr. Wm. L. Dunn, President; Drs. J. S. Apperson and G. Ben. Johnston, Vice-Presidents; Dr. Geo. E. Wiley, Recording Secretary; Dr. Wm. F. Barr, Corresponding Secretary; Dr. James W. Ogden, Treasurer. The following were elected Honorary Fellows: Drs. Landon B. Edwards, Richmond, Va.; J. F. Harrison and J. W. Mallet, University of Virginia; J. K. Barnes, Surgeon General U. S. A.; J. J. Darby, New York; J. B. Reid, Savannah, Ga.; Greensville Dowell, Galveston, Texes; R. L. Payne, Lexington, N. C. A number of interesting papers were read, some of which are promised the *Monthly*.

The American Gynæcological Society convened in Boston May 30th, and was in profitable session three days. Dr. Fordyce President, in the chair. Several good papers and discussions occupied the time, of which we shall give reports in our July number. Dr. Edward R. Pleasee, of New York, was elected President; Dr. Chadwick, of Boston, was continued as Secretary, and Dr. Paul F. Mundé, of New York city, as Treasurer.

Professor A. Atkinson, M. D., of Baltimore, Md., has been appointed Resident Physician to the Jordan Alum Springs, Va., for the ensuing Spring's season—until *about* October 1st, 1877.

The Medical Society of the State of New York will convene in regular annual session in Albany, on June 19th, and remain in session three days. Dr. E. R. Squibb, of Brooklyn, President. It adopts an excellent plan in announcing beforehand in circular form the titles and authors of papers and the order in which the papers are to be read—thus giving an opportunity to others to prepare themselves for a profitable discussion of the subjects that may be presented.

Dr. J. Marion Sims, we learn, is attending the American Medical Association, now in session at Chicago, having been prevented from making his expected visit to Paris by circumstances beyond his control. We regret to see that a too hasty and unprovoked attack has been made by Drs. Edward R. Peaslee, T. Gaillard Thomas and Thomas A. Emmet, of New York city, through the columns of the *New York Medical Journal*, June number, 1877, upon some statements contained in the biographical sketch of Dr. Sims, which, of course, has called forth a pamphlet reply from Dr. Sims. We were never, before the receipt of this pamphlet, aware of the cause of Dr. Sims' dismissal, as it turns out to be, from the very institution which he founded.

Great men suffer by such circulars issued against a brother practitioner of equal eminence, and the cause of science is in no manner promoted; the interests of the profession, indeed, in popular estimation are lowered by such squabbles.

It is due Dr. Sims from us, since we solicited his sketch and engraving for the January number, 1877, of the *Monthly*, to say that no alteration or suggestion was made by us as to the manuscript copy of Mr. Stuart as sent us, except that, noticing that Dr. Sims had erased from the manuscript a number of the titles and honors which we knew had been bestowed on him at home and abroad, we wrote to him insisting that he should allow them to be inserted. With the single exception above, the sketch was printed *exactly* in accordance with the copy sent us.

This "copy," it is true, had a number of erasures, the pen having been passed through even whole pages of manuscript, which we did not undertake to decipher. But if the sentence which was published in the *Medical Eclectic* without Dr. Sims' knowledge or consent, was also in the copy sent us, it was marked out by Dr. Sims, and thus not intended by him to be published. Dr. Sims, therefore, is not responsible for the publication of the sentence in the *Medical Eclectic* during his Southern trip last winter, which reflects upon the personal character of his former colleagues in the Woman's Hospital. This much, at least, is due Dr. Sims from us, and the information could have been obtained by private letter, had it been sought, which would have prevented the whole trouble, so far as any implication of Dr. Sims is concerned in the charge of making statements "unqualifiedly false."

By this unfortunate circular, issued in its present form, and published in the *New York Medical Journal*, a difficulty of a personal character between the "father of gynæcology" on the one hand, and three of its most illustrious lights on the other, has been thrust upon the profession, and will, we fear, result in

partizanship among the profession and injury to the interests of science. Certainly irreparable injury is done the Woman's Hospital of the State of New York, under its present management, so far as the support from other States than New York is concerned. If we of other States who have been bending our efforts to build it up, and have come to point to it with pride as an American institution, are to understand by the facts now published in Dr. Sims' pamphlet, that we are to be discourteously treated when we apply at the door for admission after a special invitation from one of the medical officers, we cannot predict what indignity may be offered after entering the halls. Of course such an institution cannot expect the aid of the general profession under such circumstances.

Urticaria Due to Quinine.—At the meeting of the Atlanta Academy of Medicine, April 24th, 1877, Dr. Todd said he had occasion recently to prescribe quinine for bronchitis. The patient took in three hours five grains, when he was summoned. He found him broken out from head to foot with urticaria, hoarse, and nauseated. The urticaria was causing intense pain and itching; so much so that rest in the same position for any length of time was impossible. It required several large doses of morphia, and eight or ten hours elapsed before he was relieved. The patient told him quinine had produced the same effects once before on him, since he lived in Atlanta, but that in South Georgia, where he had chills, it produced no such symptoms. The mother of the patient, a very intelligent lady, says it affects her in a similar manner.

Dr. W. F. Westmoreland had seen similar results from jss. grain quinine and $\frac{1}{4}$ grain ext. nux vomica as a tonic.

Dr. Taliaferro had seen two cases where quinine was always followed by urticaria. In one case it produced the rash on several different occasions. There was in the other a genuine shedding of the cuticle during convalescence.—*Atlanta Med. and Surg. Jour.*

Female Physicians in Russia.—From the *Gazette Obstetricale* of April 20th, we learn that there are now four hundred and thirty female medical students in Russia, pursuing the five years' course required. Of these, seventy-three are Israelites, nineteen Polish Catholics, eleven Polish Protestants, and the rest are orthodox. In order to enter the school of medicine regular courses of study and examinations are required. These students belong to the middle class, and the majority are from twenty to twenty-five years old; only a few more than thirty. Seventy-eight of them are married.—*American Practitioner*, June, 1877.

The Hospital College of Medicine, Louisville, Ky., has inaugurated an important feature which should be commended. It "*requires* a practical clinical examination for graduation *in addition* to the usual one upon the didactic course." During the last month of the session, the cases at each clinic are assigned to the second course students, each of the students being required to write out in full the signs and symptoms diagnosis and proposed treatment of his cases. At the end of the month the six clinical professors examine the papers and pass upon the clinical qualifications of the applicant for graduation. The vote, if favorable, counts as equivalent to that of one chair. The other examinations are also written, just as at the University of Virginia. This College is not trying to make itself popular by graduating large classes annually. On the contrary, although the classes are smaller than at either of the two other Colleges in Louisville, we are informed that at the regular examinations, more applicants are rejected by this College than at both of the other Colleges of Louisville together.

The Medical Department of the University of Pennsylvania deserves the special support of the profession. "Hereafter all future matriculates will be required to attend three courses of lectures of five months duration each before graduation. The studies will be graded, so that the first year will be devoted to the elementary branches; the second year to advanced study of these branches; while the third year will be occupied purely with practical branches." The working out of the details of this plan has been left to the Faculty of Medicine and a full announcement will soon be made. "The fees for the first and second years each will remain $140 as heretofore; while for the third year a fee of $100 will be charged." The entire plan favors a higher grade of practical medical education and should be heartily sustained.

The Eclectic Medical Society of Iowa, in session June 7th, at Des Moines, voted to memorialize their Legislature for the establishment of two eclectic professorships in the State University. Should the petition be granted, we hope the "regular" Medical Faculty will have the good sense to do as the Faculty of the University of Michigan has done—retain their positions, and not let "irregulars" get the entire control.

The Transactions of the International Medical Congress, (meeting in Philadelphia, 1876), can now be ordered from Dr. Caspar Wister, Treasurer, 1303 Arch street, Philadelphia, Pa. Price $6 in advance. This is a much smaller price than was thought would have to be charged. Every doctor should invest six dollars in this work as a necessary part of his armamentarium.

Dr. Wm. W. Murray has been elected by the City Council of Baltimore, a member of the Board of Public School Commissioners —to serve for two years—from March 1, 1877.

A Choleraic Disease has broken out among the troops at Ringgold Barracks, Texas. The *Brownsville Sentinel* says about thirty are in the hospital, and six have died. The attacks commenced with diarrhœa and colic. A similar disease has appeared in the city, and several cases have proveed fatal within the last few days.

Mortuary Statistics of Montgomery, Ala.—A letter from Dr. T. A. Means, Registrar and Health Officer of Montgomery, says that the total number of deaths in that city during the sixteen months ending May 1, 1877, was 367, of whom 61 were white males, 56 white females; 121 colored males, 124 colored females. Total population 15,000. The above mortuary record does not include deaths of non-residents.

The first Annual Meeting of the **American Dermatological Association** will be held at Niagara Falls September 4, 1877. "The titles of all papers to be read at any annual session shall be forwarded to the secretary [Dr. L. Duncan Bulkley, New York City] one month before the first day of the session." Dr. James C. White, Boston, President.

The Ohio Valley Medical Practitioner is to be a monthly journal to begin July 1, 1877, to contain 40 pages of reading matter, Price $1.50 a year. Owned and edited by Dr. J. W. Compton, 330, Third Street, Evansville, Indiana. The prospectus looks like the editor means "business." All such enterprizes should be sustained.

The Delay in the issue of this number has been unavoidable. The July number will be issued "on time," as railroad men say. It will contain reports of the proceedings of the American Medical Association, in session at Chicago.

Dr. W. A. B. Norcom, Edenton, N. C., will deliver the alumni address at the University of Pennsylvania, March, 1878.

Dr. Lewis A. Sayre, of New York City, will leave for Europe on June 19, and will remain abroad until September.

Obituary Record.

Dr. Charles A. Budd, formerly Professor of Obstetrics, &c., in the Medical Department of the University of the city of New York, died at his residence in New York city, May 17th, 1877.

Dr. J. A. Logan died at his home in Newport, Giles county, Va., on May 1st, 1877; age 32 years. He was a member of the Medical Society of Virginia.

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Original Communications.

ART. I.—*Lupus Vulgaris, or Lupus of Willan.* By GEORGE H. ROHE, M. D., Lecturer on the Diseases of the Skin, College of Physicians and Surgeons, Baltimore, Md.

Under the name of *lupus vulgaris*, or simply *lupus*, English and German authors describe an affection of the skin, beginning with the formation of brownish-red nodules, which become circumscribed infiltrations (lupus non-exedens, of English authors), or ulcerated patches (lupus exedens). These alterations are slowly progressive, or after a time remain stationary, ulcerate, or become absorbed, leaving a depressed whitish cicatrix. The anatomical seat of the disease is usually in the true skin, and its glandular appendages; but the disease may extend downward and affect the subcutaneous connective tissue, and possibly the muscles and bones, although the latter extension, if it ever occurs, is extremely rare.

To enter here into a description of the clinical appearances of lupus would take up too much time; and inasmuch as you are thoroughly familiar with them, I will confine myself to a brief account of the nature, morbid anatomy and treatment of the affection, trusting that in so doing I shall be aiding in the dissemination of more correct notions as to the pathology, and consequently sounder and more rational methods of treatment of this heretofore considered obstinate disease.

The French writers, and also one American author, describe, under the generic title of "the scrofulides," the disease we are

considering and several others. This name advertises their views of the pathology of lupus. But it will hardly be necessary to say to you that in very many—in the majority of cases of undoubted lupus, the characteristic signs of the habit of body commonly known as struma or scrofulosis, are entirely absent; in others where these signs—swellings and suppurative inflammations of the lymphatic glands, cachectic appearance, etc.—are present, they only manifest themselves during the course of the skin disease, and might, with more reason, be considered a consequence than a cause of the lupus The highest authorities in dermatology in Germany, Austria and in this country, absolutely deny any genetic connection between scrofulosis and lupus. The connection of lupus with hereditary syphilis, maintained principally by Veiel and Erasmus Wilson, is not supported by any trustworthy evidence whatever.

There seems to be, however, causative connection between lupus and epithelioma, as a number of instances have been observed in which the latter was developed upon the seat of an ulcerating lupus.

With respect to the etiology of lupus, I may say that all that is really known is that it begins nearly always between the third and twentieth year of life, and that the disease occurs very slightly more frequently in females than in males. Hebra and Kaposi give it as constituting $1\frac{2}{3}$ per cent. of all skin diseases as observed by them in Vienna. It is decidedly less frequent in this country.

Troublesome complications sometimes occur in lupus, as suppurative adenitis, erysipelas, papillary hypertrophy developing sometimes into epithelioma. When occurring in the neighborhood of joints, lupus may cause pseudo-anchylosis from cicatricial contraction.

The anatomical changes consist in an infiltration of the true skin, either in masses or disseminated, and round-celled new formations, surrounded and pervaded by young granulation tissue. The infiltrated cells are remarkably small, with strongly refractive nuchei. In consequence of these cell accumulations, the normal tissue of the skin is gradually atrophied or absorbed. Later, the cells of the new formation undergo fatty degeneration, are absorbed or cast off by ulceration, and a depressed

cicatrix is left to indicate the former seat of the morbid process. The cellular proliferation is propagated along the course of the vessels, upward into the papillæ and downward to the sebaceous and sweat glands and hair-follicles, and into the panniculus adiposus. The assertion of Rindfleisch, that the cellular infiltration begins in the sebaceous glands, has been disproved by later and more accurate observations.

Any one of you, upon first reading surgery in the generally excellent English text-books, must have fervently hoped never to be called upon to treat a case of so-called lupus exedens. The old name, *noli me tangere*, was itself sufficient to fill the practitioner or unexperienced student with dismal and discouraging thoughts. More extended observation and larger experience, resulting in the introduction of new methods of treatment, have, however, removed, very greatly, the reasons for an unfavorable prognosis. Lupus is, in the majority of cases, a curable disease, although the removal of any lupus tissue does not guard against a relapse.

The treatment may be divided into general and local. As far as concerns general treatment, it must be conducted on general principles. By this I mean, if your patient needs tonics, give him the remedies usually recognized as such—fresh air, exercise, good food, iron, quinine, perhaps arsenic, if he needs it, cod liver oil. No medicines should be given that are not indicated by the general condition of the patient. There have been no internal specifics yet discovered for lupus.

The local treatment of lupus consists in the thorough destruction of the morbid growth. This is accomplished either by the slow or rapid action of chemical caustics, the galvano-cautery, or removal by the knife or curette.

In a case of superficial, non-ulcerated lupus, attempts, which will often fail, may be made to induce exfoliation and absorption by strongly stimulant (mild caustic) applications, as soft soap, either by means of frictions or spread on cloth and applied as a plaster, painting the surface daily or every two or three days, with solutions of caustic potash, nitrate of silver, chloride of zinc, iodine, carbolic acid, &c. Any of these may succeed in the proper case, though usually it is merely a waste of time to temporize with them. The most effective are probably carbolic

acid in 25 to 50 per cent. solution, or iodine, as recommended by Hebra:

℞. Iodinii,
Potassii iodidi..... aa ℥i.
Glycerini..... ℥ij. M. S. Iodglycerin.

Mercurial plaster, consistently applied, has sometimes sufficed to effect a cure. More likely than either of these to yield a good result, are the stronger caustics, of which the best is the nitrate of silver *en crayon*, from the facility of its application, and the fact that sound tissue is not easily destroyed by it. Next in importance is the arsenical paste of Hebra, which is prepared according to the following formula:

℞. Acidi arseniosi.....grs. x.
Hydrarg. sulphuret. rubr...℥ss.
Migt. simplicis.....℥ss. M. Make ointment.

This only destroys the diseased tissue, but great caution is always necessary in using such an active poison, and it is not recommended unless the patient remains constantly under the eye of the surgeon, as in a hospital. One of the most energetic caustics, as you well know, is hydrate of potassa. It is objectionable, however, on account of the difficulty of controlling its action.

The galvano-cautery has been used with great success by Hebra, Neumann, Bryant and others, but it is manifestly not adapted for use by the general practitioner.

Excision with the knife is objectionable for the reason that either too much or too little is removed; if too much, there is loss of normal tissue which can ill be spared; if too little, the operation is unavailing, as the growth will continue to extend as if no operation had been performed.

I shall now mention a plan of treatment of lupus, which is of comparatively recent introduction, and which has proved to be, of all methods mentioned or heretofore tried, the best. I mean the removal of the morbid growth by means of the curette. The instrument is modelled after the uterine curette of the late Professor Simon, of Heidelburg, and is commonly called Simon's spoon. This particular modification was made by Messrs. Codman & Shurtleff, of Boston, for Dr. Edward Wigglesworth, of that city. It consists, as you see, of an oval spoon with sharp edges mounted with its shaft upon a strong handle. With this

instrument, any of the different forms of lupus may be easily, rapidly and effectually removed, with the result of producing a smooth, soft and rosy cicatrix, approximating very nearly in appearance to the normal skin. The scraping out of the diseased tissue does not give as much pain as cauterization, and has the additional advantage that it ceases as soon as the operation is over. Anæsthesia is but rarely necessary. The after treatment consists simply in the application of wet lint for a few days, when any simple ointment may be used.

The removal of the diseased tissue must be thorough, and, therefore, considerable pressure must be made upon the instrument while using it. There need be no fear of removing too much, as the healthy skin offers considerable resistance to the progress of the instrument. I have used the curette, and witnessed the results of its application in a number of cases of lupus, and in every instance with the happiest results. I should use it, in suitable cases, in preference to every other method, confident that it would yield better results than all others combined.

For the removal of the small spots of infiltration left after the use of the spoon, and of very small isolated nodules, Volkmann recommends "multiple punctiform scarification." This is performed by making a great number of small punctures, with a sharp-pointed knife, to the depth of two or three lines. The bleeding is arrested by pressure with a small pledget of lint, which is allowed to remain until it falls off of its own accord. The operation is repeated as often as necessary every two or three weeks. Absorption of the lupus infiltration usually follows after the operation has been done three or four times. Mr. Balmanno Squire, of London, has lately modified this operation by substituting linear for punctiform scarification. The operation is done by him under local anæsthesia, and is consequently accomplished more rapidly, is painless and followed by equally good results.

And yet, with all these advantages, the treatment of lupus is no child's play. Ripe experience and sound judgment, so necessary to all success in surgery, are in hardly any case more needed than here. To know the proper remedy; when and how to use it—these are requirements without which success will always remain problematical.

ART. II.—*Delivery of the Breech with the Forceps.—Resuscitation of Asphyxiated Child by the Use of Electricity.* By J. HENRY FRUITNIGHT, A. M., M. D., Member New York County Medical Society, etc., New York City. (Read before the Northwestern Medical and Surgical Society of New York City, May 16th, 1877, with a report of Discussion thereon. Professor James L. Little, M. D., President.)

On Friday, December 29th, 1876, at 2 A. M., I was summoned to attend during confinement Mrs. J. G., primipara, æt. 19½ years; American. During gestation, nothing worthy of note was observed, save that the patient became the subject of an inordinate appetite for food, which she always gratified. None of the other phenomena usually present in this condition were remarked. She had always enjoyed good health. She is tall, of large and firmly set figure, and in temperament she is inclined to be phlegmatic.

When I reached the bedside of the patient, I learned that she had been suffering with labor pangs for about five hours, though she had had premonitory ones for some days previous. Upon making a vaginal examination, the *introitus vaginæ* was found to be exceedingly narrow; the husband, indeed, informed me that when coitus was attempted during the earlier months of their wedded life, its consummation was impossible, because of the small vaginal orifice of the patient, and that when he did succeed in accomplishing the act, it caused her much pain, which continued a long time afterwards. I have stated this fact at some length, since this extreme narrowness will, to a great extent, solve the difficulties of the case.

Upon reaching the os uteri, which was situated high up, it was found to be dilated to about the size of a five cents nickel piece; and though it was really impossible to distinguish exactly the nature of the presenting part, yet it was surmised from the absence both of hardness and of firm resistance to the touch to be *certainly* not a head, but most probably a breech presentation. The membranes had not yet ruptured; so the patient was encouraged and instructed to help herself as much as possible. The pains, thereupon, came on more actively and forcibly; and within an hour another digital examination was made, when the *os* had dilated to the size of a silver half dollar, and I was enabled to verify my surmise that the breech presented.

The left trochanter major of the fœtus was directed towards the right ileo-pectineal eminence of the mother, and the opposite trochanter major, of course, towards her left sacro-iliac synchon

drosis. Hence its position was dorso-anterior, and in the diameter which is most frequent and favorable in breech presentations.

The pains continuing efficient, the membranes were soon ruptured, whilst at the same time the usual mechanism of labor was being properly effected until the outlet of the pelvis was reached at about 7.30 A. M. Here some difficulty arose, and despite all efforts the breech would not advance, the genitals only passing out into the world, being in a highly œdematous and ecchymotic condition. Superficial incisions were made on either side of the vaginal orifice with a view to enlarge the opening, and thus to facilitate the passage of the breech; at the same time ergot was administered internally to excite the uterus, if possible, to more strenuous efforts. The only result, however, was a slight advance of the genitals. I then attempted to reach the flexure of the thighs, according to the practice recommended in such cases, in order to bring down the lower extremities in succession. It was found impossible, however, to reach the desired region, on account of the contracted nature of the maternal parts as well as on account of the distance of the child's groin from the aperture of the vagina, and the attempt, therefore, was abandoned.

Fearing now that the integrity of the genitals of the child, which had been exposed to immense pressure, would be endangered, if delivery was not speedily accomplished, and as the mother also appeared to be in a state of exhaustion, it was determined to call in assistance and counsel. Accordingly, at about 9 A. M., Dr. Edward C. Harwood was summoned. After the doctor had examined the patient, and had also satisfied himself of the impracticability of reaching the child's groin, it was agreed that instrumental interference was necessary. At first it was suggested that the fillet should be used, but when it was recollected that we could not reach the fold of the thigh even with the hand alone, it was not at all likely that we would be able to apply the instrument in question.

The next alternative, which probably will be suggested to the minds of all, is the blunt hook. This instrument, however, was at once discarded as an implement of mutilation, which, we agreed, should be employed only when all other means, including the use of the forceps in suitable cases, had proved unavailing.

For a moment we were at a loss to know what to do. Authorities denied the propriety of the application of the forceps to this extremity of the fœtus. Leishman, in regard to this point, unqualifiedly says the forceps, being specially constructed for application to the fœtal head, are not available in breech

cases.* Upon due consideration of all the facts of the case, however, we thought that if the breech were brought further down, the thighs could easily be delivered. Hence, Dr. Harwood recommended the application of the forceps to the breech to secure this end.

In order to meet with promptness all emergencies which might arise, everything which might possibly be required in the management of the case was got ready before proceeding to the performance of the operation—this *readiness* of means being considered a specially important condition of success in the issues of the case. In the meantime, to rally the patient and to give her some relief from pain, and at the same time to enable us the more readily to bring her under the influence of an anæsthetic, a quarter of a grain of sulphate of morphia had been administered. Whilst I was administering the ether to the patient, Dr. Harwood thoroughly lubricated the genital organs of the mother by the injection of several ounces of olive oil; the bladder had been previously emptied by means of the catheter.

I being fatigued, Dr. Harwood kindly introduced the blades of a pair of Elliot's forceps, and in such manner that they were applied over the trochantera majora of the fœtus. I thereupon locked the blades, and whilst the doctor supported the perineum, I made traction in the same manner as is practised in cephalic cases; and within the space of half an hour the buttocks were delivered. Removing the instrument, I was now enabled to hook my fingers over the flexure of the thighs, and to deliver them without any further delay or obstacle. Having wrapped a towel about them, the legs were seized and strong traction was made, until I was able to reach the shoulders, which I then drew down one after the other. Having felt for the cord, pulsation was indistinguishable, and we therefore had very little hope of delivering a living child; nevertheless, we sought to disengage the head as quickly as possible. Dr. Harwood having again lubricated the maternal parts, was aiding the escape of the head at the orifice of the vagina, whilst I, by curving the trunk of the child strongly over towards the abdomen of the mother, caused extension of the head, which, aided by strong traction, produced the extrusion of the head without delay, which occurred at about 11 A. M. Almost simultaneously the neck was released from a coil of the funis by which it was encircled. It may be remarked here that the new-born babe equalled in weight and size any ordinary child of the age of from four to six weeks.

As we had been apprehensive of the life of the child, we were

* *System of Midwifery*, pp. 454 and 476. Wm. Leishman, M. D., Philadelphia, 1873.

highly gratified to observe it making an attempt to gasp. Dr. Harwood remained with the mother to attend to the delivery of the placenta, which was effected without difficulty, whilst I proceeded to resuscitate the child. The methods usually employed under the circumstances, such as sudden and alternate immersion into hot and cold water, flagellation, etc., not omitting artificial respiration, were all carried out in this instance without perceptible benefit. The cord was cut and left untied for some few moments in order to hasten resuscitation by thus allowing some blood to escape. Finally, Dr. Harwood brought the faradic current into requisition. It was employed in the following manner: The positive pole was applied directly over the region of the phrenic nerve in the neck by Dr. Harwood, whilst I brought the other pole in contact with the Doctor's free hand, which he moved slowly to and fro along the spine and the region of the diaphragm and various other portions of the child's body, including the extremities, thus securing, by this manœuvre, a criterion by which to judge the strength of the current which was passing, and consequently enabling us to make use of a current, sufficiently mild and modified to suit the sensitive nature of the asphyxiated infant.

Its lips were also occasionally moistened with brandy and water for the purpose of stimulation. We very soon succeeded in bringing the respirations up to four per minute, and after we had continued our efforts for one hour, they were crowned with success, for all the functions of extra-uterine life were fully established.

The mother had, in the meantime, been "put up in" bed, and had recovered from the anæsthetic without any adverse symptoms whatever having occurred. During her subsequent period of confinement, which lasted about two weeks, her temperature never rose above 102°F., nor did her pulse rise over 108. Extreme quiet, with a liberal use of carbolic acid in solution, of the strength of 25 per cent. as a lotion to the genitals of the mother, was ordered. The same solution was to be sprinkled freely about the apartments, bedding, etc. Two drops of the same acid in combination with two grains of sulphate of quinine were administered internally in pill form every three hours. All this was done with a view to prophylaxis against possible puerperal infection.

The child had suffered no further injury than the enormous swelling and infiltration of the scrotal tissues, which in places were also superficially abraded. The scrotum had attained the dimensions of a medium-sized Messina orange, and was very livid, which was due to the venous congestion and ecchymosis,

following the intense pressure to which the parts had been subjected. There were also a number of abrasions present at the points where the blades of the forceps had clasped the buttocks, but they were of little significance. There were some apprehensions that a gangrenous or erysipelatous process might possibly attack the scrotum; the use of cloths moistened in warm water with carbolized olive oil supplemented by the application of the benzoated oxide of zinc ointments, however, caused all the structures involved to assume a condition of health within a week's time.

The termination of the case was indeed most felicitous.

From some points of view, this undoubtedly is a unique case. Among other things we may call attention to the remarkably favorable course of the parturient function prior to the arrival of the fœtus at the outlet of the inferior strait where all the difficulty suddenly arose.

The almost insignificant injuries to the child are also a cause for congratulation when we consider the obstacles which it was obliged to overcome before its birth, as well as the great force both of compression and of traction employed in the instrumental delivery.

During gestation our patient became, as has already been stated, the subject of a highly voracious appetite, which she uniformly gratified. As a consequence she increased in weight and strength, and of course the fœtus, within her uterus, also partook of this increased tissue activity. Hence, we have a large fœtal body to pass through the constricted maternal canal and outlet. What else is to be apprehended in such cases but delay in the delivery of the fœtus with all its attendant difficulties? Another case illustrating the co-relation between the gratification of an imperious appetite, a large child and a small maternal outlet, with consequent delay and instrumental delivery, has fallen under our observation since the occurrence of the case herewith reported. Hence the deduction is, that in similar cases, where the physique of the woman is such as has been stated, the appetite should always be restricted to the just necessities and demands of herself and child, avoiding an excess, no less than an insufficiency of food, so that, by such self-denial and temperance in diet, she may secure to herself and child some hope of a safer and speedier delivery.

The escape of the perineal tissues from all rupture, after having been subjected to such extreme tension, was also very gratifying. This is to be ascribed to the injection of olive oil into the vagina after the method practised and recommended by Dr Harwood.

Another very interesting feature of the case was the resuscitation of the asphyxiated child, by the employment of the electrical current in the manner detailed in the foregoing pages, after all the other means usually employed had proved themselves to be futile. The advantage of having all things ready beforehand was herein also signally manifested. The case seemed hopeless, for the pulsation of the funis had all but ceased, and the child would undoubtedly have been lost if the battery had not been so opportunely at hand. Hence, it may be recommended, when practicable, to have an electrical apparatus in readiness, to be used in the resuscitation of asphyxiated children, when other means have failed.

The rejection of the means usually employed in delayed breech cases, such as the fillet and the blunt hook, and hence the application of the forceps to the pelvic extremity of the fœtal ovoid, in consequence of the difficulty encountered in reaching the flexure of the thigh when all progress of the child had ceased, is *the* point of special interest in the clinical history of this case, and to which we particularly invite attention, This procedure, the application of the obstetrical forceps to the breech, we believe has been rather infrequently done. Our associate member, Dr. Allen S. Church, in conversation with the writer, said that he had, in one case in his practice, delivered the breech in this manner. If the extensive literature relating to the subject of obstetrics be consulted, it will be discovered that this application of forceps is ignored by many writers, whilst from those who do not speak of it, it receives but a meagre notice. Perhaps it will not be amiss to quote here the views of a few authors on this subject.

Thus Barnes says: "Hooks and forceps will, in all likelihood, either destroy the child or involve its death through the delay arising out of their inefficiency, or they may seriously injure the child"; and he concludes with the words, "the forceps may injuriously press upon the abdominal viscera."*

* Page 184, Lecture on Obstetrical Operations, etc., by Robert Barnes, M. D., London, 1870.

Cazeaux, in speaking of the forceps, says, "*the instrument ought only to be applied on the head of the fœtus.*" He emphasizes this sentence by writing it in *italics*. After stating that it had been recommended to apply them to the breech, he continues, "but the bones of the pelvis are too deficient in solidity, and their articulations offer too feeble a resistance to be able to support the pressure made by the forceps without hazard. Besides, it would be difficult to get the breech in the hollow of the blades, without carrying their points above the iliac crests against the soft walls of the abdomen, thereby producing a more or less serious contusion of the abdominal organs. As a general rule, the breech presentations do not appear to me to warrant the use of the forceps. I am aware, however, that M. Stolz recommends its employment under such circumstances, and I am induced to believe that M. P. Dubois would not hesitate in resorting thereto, in some cases, when direct traction on the pelvic extremity might be difficult."*

Jonlin, a French writer, admits the applicability of the forceps to the dead child, but considers them dangerous to a living child, preferring to deliver with the blunt hook in the latter case.† He thus acknowledges the practicability of the operation. And thus we will find it throughout the whole list of authors, each and every one of them presenting the self-same arguments against the safety and the practicability of the performance of the operation. Hence, the weight of authority is most certainly arrayed *against the use of the forceps* in breech cases.

If the words of the authorities be closely examined, it will be remarked, that they merely make a bare statement, which is unsupported by any recorded results of cases which have occurred in actual practice; hence, the inference is, that they arrived at their conclusions by the method of *â priori* reasoning. Now it will be admitted, we think, that however logical it may be, this certainly is not a just and scientific process of reasoning where we can avail ourselves of experimental proof, as we assuredly can in the cases under discussion.

Let us now summarize the objections which have been preferred against the operation. Aside from its impracticability

*Page 965, Cazeaux's Work on Midwifery, edition of 1873, Phila.
†Page 1032, Traité Complét D'Accouchements. Par M. Jonlin, Paris, 1867.

and inefficiency, the dangers of compression of the abdominal viscera, of luxation of the hip-joint, and of fracture of the femur, are especially exclaimed against. In our case, as already related, none of these dangers or difficulties were met with. It may be urged by some that it is but a single case, and is therefore not to be accepted as a guide to practice. We acknowledge it to be so, but yet we claim that so far as it extends, this case, in its feasibility, and in its safe results, is a practical refutation of the statements of authors, that it is impracticable, inefficient and dangerous to apply the forceps to this variety of pelvic presentation. And, moreover, since successful practice makes authority, this case, so far as it goes, becomes authoritative.

Of course the forceps must not be indiscriminately used in breech cases. In all cases where the unaided hand or the fillet will be likely to succeed, all other operative interference is to be studiously avoided. When these means, however, fail, and the propriety of the use of the blunt hook is to be considered, then it is, we assert, that the possibility of the use of the forceps should also be taken into account before determining upon the employment of the first-named instrument. All authorities agree that the use of the blunt hook is attended with great mutilation, and very often with the death of the child. The forceps will most likely injure the child but very little—at any rate much less than the blunt hook would—whilst they also grant us a better hope of delivering a living child. The operation is therefore, *particularly* favorable to the child; and we think that the delivery is just as speedy as when the blunt hook is used, in which regard it favors the mother. By careful management, as little danger to the parts of the mother is incurred as when the forceps are used in ordinary cephalic cases, whilst like precautions are to be observed in both classes of cases.

For these reasons, then, in the behalf of the child, we beseech you to consider seriously before giving your preference to the blunt hook, whether there is any possibility of the application of the forceps in the cases indicated.

It seems to us that the only practicable way of applying the forceps to the breech is to guide them in such manner that they shall become adapted to either buttock, as was done in the case just reported; there is then certainly less danger of causing

mutilation of and injury to the child. It would be manifestly improper and dangerous to apply the blades in such fashion, that they would embrace the abdomen and back of the child.

Traction is to be made in exactly the same manner as when the forceps are applied to the head.

In breech cases the short forceps are, of necessity, useless—the long ones only being available. Of the long forceps, those designed by the late Dr. G. P. Elliot, or those which approximate to them in their curves, are to be preferred. Since these hold quite firmly and answer all indications, there is no need of a specially constructed pair of forceps.

In conclusion, we again urge, when feasible, the use of the forceps in breech cases, with the hope that in the future less and less recourse may be had to that cruel and barbarous instrument of torture, the blunt hook.

Discussion.—Dr. E. F. Ward reported a similar case which occurred in his practice where he applied the forceps to the breech. After succeeding in drawing the breech down sufficiently to introduce the finger in the flexure of the thigh, forceps were applied over the crests of the ilia; large child; born asphyxiated. All other means having failed, he succeeded in resuscitating the child by the use of electricity. One pole was applied to the phrenic nerve; the other over the body and limbs of the child, and the current was continued about twenty minutes. The perineum was ruptured and had retained placenta, which were treated in the usual way. Patient made good recovery.

Dr. Mundé stated that none of the writers recommended the use of forceps in these cases, except that Scanzoni stated they might be used when the use of the blunt hook was impossible. He agreed with the author of the paper just read, that their use was practicable. He referred to cases reported by Dr. T. G. Thomas, of resuscitation by electricity after the child had been *apparently* dead for a long time.

Dr. Caro thought the great difficulty was to deliver the limbs, which was increased by drawing the breech low down in the cavity of pelvis. He had always succeeded with his hand, by aid of anæsthetic or morphia, to dilate the soft parts of the

mother. He stated that Dr. J. E. Taylor recommended forceps in breech presentation. He thought one difficulty was the spasmodic contraction of the os uteri around the neck of the child. He therefore thought the use of ergot decidedly objectionable. He had never used electricity in cases of asphyxia, as he had always succeeded by other means. Saw no objection to its use.

Dr. Burchard related a case where the breech was mistaken for a face presentation. Delivery was effected by the use of forceps. In case of impacted breech, he had succeeded in passing a "fillet" around the thigh of the child by means of a hook. He thought the use of electricity in these cases fully established. In one case the battery was used forty-eight minutes before there was any sign of life. This means of resuscitation should be persisted in for a long time before it is given up.

Dr. Harwood thought the use of forceps in breech cases justifiable. He recommended the free use of oil to lubricate the canal. By passing the electric current through the hand of the attendant one could measure its force.

Dr. McLaury related a case where the mother had inordinate appetite during gestation and gave birth to a very large child, which gave rise to some discussion on this subject.

Dr. Newman criticised the use of terms as applied to electricity in the discussion, which elicited some remarks from the different members upon this point.

ART. III.—*The Feet of Catarrhal Patients.* By THOMAS F. RUMBOLD, M. D., St. Louis, Mo.

Cold feet predispose to colds in the head, throat, ears and head. It is almost useless to treat a patient for a catarrhal condition of these organs, if the feet are not kept warm. No external influence so certainly causes a congestion of the mucous membranes of the respiratory organs as cold and wet feet.

It is frequently the case, that wearing woolen stockings will cause the feet to perspire; they are then liable to become cold. Should this be the case, a thin pair of cotton stockings should be worn under the woolen stockings. It will be well for those patients who have cold feet, whether damp or not, to wear their

stockings in this way, that is, to draw on a pair of woolen stockings over a pair of cotton stockings—neither of the pairs need be very thick.

A good remedy for cold and damp feet is to bathe them at bedtime. For many years I have advised my patients, when taking this bath, that they should, after undressing, wrap a blanket around the body from head to foot, the room bing warm, then sit on the side of the bed and immerse the feet in a sufficient quantity of water, heated to blood heat, to cover the ankles, having the blanket at the same time wrapped around the limbs and foot bath-tub.

The position on the side of the bed has two advantages: the patient, in being near the bed, will be able to get under the bedclothes without the loss of the warmed air enclosed around his limbs and body by the blanket. Again, in this position, the body will be more erect than it would be if the person were sitting on a chair; consequently, more of the limbs will receive the warmed and moist air from the bath-tub—two adjuncts necessary to a successful foot bathing.

After the feet have been in the warm water about three minutes, they should be raised out of the tub and one pint of "boiling hot" water poured into the bath; the feet should then be immersed again about three minutes longer, at the end of which time a second pint of hot water should, in the same manner, be added to the bath, and, with the same interval, a third, fourth or more pints should be added, until the water in the bath-tub is as warm as the patient can bear it. After the feet have been in the water, in all, about fifteen minutes, they should be dried by being well rubbed with a coarse towel, and then an inunction should be applied with considerable friction. Lastly, they should be covered with a pair of cotton stockings, well warmed. The drying and annointing should be done while the feet are held over the bath-tub and inclosed in the blanket. The patient should get into bed completely enveloped in the blanket. For many years I have used an annointment for the feet with and without bathing; it assists in preventing them from sweating and from being cold. During the last two years I have employed "vaseline" as an inunction; it is far superior to any of the oils or cerates in common use.

By the time the feet are bathed in this way, the body will be in a gentle perspiration—this should be allowed to dry gradually, after which, the blanket may be removed.

If there is fœtor from the feet, salicylic acid and bromide of potassium $\overline{aa}$ grs. v ad. ℥j of "vaseline," will, in a few bathings and annointings, correct this condition.

Plunging the warm feet in cool water immediately on getting out of bed in the morning, has, frequently, a good effect.

A large majority of females fasten up their stockings by elastic garters. Girting the limbs in this way is very liable to induce cold feet on account of impeded circulation; the veins being so much compressed by the garter that the blood cannot leave the limbs so readily as it should do, while the heat forces the blood to them through the arteries, whose walls are firm enough to resist the pressure of the garters.

Almost every patient will claim that her garters are not tight; yet most of them will acknowledge that when the elastics are removed at night, the creases under their knees, caused by the constriction of the garter, are deep enough to bury half of the thickness of the fingers.

In order to maintain the hose in their place without the aid of garters of any kind, they should be pulled on over the stocking-knit drawers and fastened with tapes. Four of these tapes, about six inches long, should be sewed on the drawers at about the middle of each thigh, one on the outer side and one on the inner side; also four tapes of the same length should be sewed, one on the outer and one on the inner side of the top of each stocking. The tieing of the four pairs of tapes secures the hose in their place, and, as they are long enough to come above the knees, more of the limbs are then covered than when they are held up by the strangulating elastic or non-elastic garters.

Boots that are thin or tight, and shoes that are low in the ankles, should be avoided in cold or damp weather. Heavy, loose-fitting boots, with double uppers and soles—the latter made wide—are the proper coverings for the feet in cold or damp weather.

India-rubber overshoes should be worn in wet or damp weather only, and they should be removed from the feet as soon as the wearer enters the house.

Slippers should not be worn by either sex during cold or even cool weather. One of the ways in which a cold is *mysteriously* (?) contracted, is to exchange a pair of warm boots for a pair of low slippers. Those who do this had forgotten that their feet and ankles had been protected all day, and that they have not only uncovered them, but placed them in the coldest stratum of air in the room. If they had taken the precaution to draw on over the stockings which they usually wear a pair of heavy woolen socks, the chances for taking cold from wearing the slippers would have been greatly decreased.

ART. IV.—*Case of Infantile Paralysis, Presenting some Unusual Features.—Remarks.* By L. S. JOYNES, M. D , Emeritus Professor of Physiology in Medical College of Virginia, etc. (Reported to the Richmond Academy of Medicine April 17,1877.)

The subject of this case, a female infant between 6 and 7 months old when first seen, was born prematurely at the eighth month, and has been delicate ever since her birth, with a feebleness of cry, suggestive of imperfect expansion of the lungs. She has been raised by hand, and had been living for some time before the attack of paralysis on condensed milk, which seemed to agree better with her than fresh milk. During last summer she had an attack of dysentery, after recovering from which she suffered an attack of cholera infantum. This left her in a feeble and puny condition, from which there was a gradual improvement up to the 3d of August, though she still remained weak and pale. She had then cut no teeth, nor did any appear to be pressing on the gums.

On the afternoon of the day mentioned, after having been in the morning as well as usual, with excellent appetite and digestive functions in satisfactory condition, she was observed to be languid and listless, and indisposed to be amused, or to take notice of objects which ordinarily interested her. No fever or other serious symptom was noticed that night: but on the following morning it was observed that there was a distortion of the face towards the right side when she cried or laughed—the left side remaining motionless, or nearly so. When she cried, she closed the right eye perfectly, while the left remained half open—though it also closed *during sleep.* Her head was inclined slightly to the right side. Left arm and leg very much weakened, though not completely paralyzed. General sensibility unim-

paired, and sight and hearing perfect. The child did not seem to suffer any pain.

At night, as well as during the two or three nights following, there was fever, which passed off or declined in the morning. The child was dull and fretful during the fever, but there was no stupor, spasm, or other special indication of cerebral disorder. In the morning the natural sprightliness was in a great measure restored.

August 7. Visited the child to-day for the first time, when I verified the existence of paralysis as already described. It may be added that when the child was feeding from the bottle, the milk kept incessantly escaping from the left corner of the mouth. While she could take hold of an object with the left hand (although less firmly than with the right), she was quite unable to raise the arm, and if raised by another person, it dropped powerless by her side. Could not support the weight of the body on the left leg, though it retained some power of motion. Intelligence evidently unimpaired, and sensation, both general and special, equally intact. Pupils large, but no inequality between them; both equally sensitive to light; conjunctivæ not injected. No fever; temperature of head and general surface natural; pulse quiet. Bowels inclined to constipation. Ordered one grain of calomel and one drachm of castor oil, to be taken together; afterwards, potass. bromid. and potass. citrat. each 1½ gr., in a mucilaginous mixture, every four hours. Feet and legs to be immersed in warm water morning and evening, and head to be frequently bathed with cool water when fever rises. Frictions to spine twice a day with linimentum saponis.

On the following day, the bowels having been freely moved, and fever being absent, ordered ferri pyrophosphat., ½ gr. in solution three times a day; also cod liver oil, 5 drops, in emulsion. A return of fever, with irritability of stomach, interfered with the administration of these remedies for a day or two; but their use was soon resumed, and there was no subsequent return of fever.

August 17. General condition somewhat improved; power of motion in the leg decidedly increased; arm and hand very much in the same condition as before reported. Cod liver oil to be increased to 7, and then to 10 drops, if well borne. Frictions to spine to be continued.

August 21. Substituted tinct. ferri chlorid., 1½ drops, for the pyrophosphate.

August 26. One lower incisor tooth had made its appearance. Repeated nausea had compelled the omission of the cod liver oil.

The power over the leg and foot seemed to be entirely restored. Distortion of the face in smiling and laughing much diminished. Power of the upper extremity very decidedly improved: could raise the hand to the level of the face when tempted to do so by holding up a watch or other attractive object on that side while the right hand was confined. Treatment continued.

September 28. Child still pale and thin, though lively. A second incisor tooth made its appearance not long after the first. Continued amelioration of paralytic symptoms. Distortion of face in laughing no longer discernible, and movements of the lower extremity perfect. All the motions of the hand and arm seemed also to be perfectly executed; but the child did not use this hand as readily (or, perhaps, as *willingly*) as the other.

January 31, 1877. Did not see the child again until this date, though I had heard, from time to time, of its steady improvement. On careful examination, no remaining trace of paralysis could be detected, and the general health was greatly improved. Eight teeth had made their appearance.

The history of this case leaves no doubt that it was truly infantile paralysis, and not hemiplegia dependent on cerebral lesion. The following points of interest in connection with it may be noted: First, The very unusual extent of the paralysis, involving, as it did, nearly all the muscles of one lateral half of the body. It is well-known that infantile paralysis is generally limited to a single limb, which is almost always one of the lower extremities; sometimes only a particular group of muscles, or a single muscle, is involved. Of 43 cases observed by West, although in 14 the arm and leg on one side were simultaneously affected, in only one of these were the facial muscles of the same side involved; and even in that, it does not appear that the sterno-cleido-mastoid was implicated, as it evidently was in the case now reported.

Secondly, It is a notable and altogether exceptional fact that the arm was more affected than the leg, and did not regain its power fully for some time after that of the leg seemed to be entirely restored. The contrary is the rule. Not only is the lower extremity much more frequently affected than the upper, but Radcliffe states it as "the constant rule for recovery to be slower in the legs than in the arms," while in cerebral hemiplegia the reverse generally holds good. But, as experience proves that in infantile paralysis the arm may, in exceptional cases, be para-

lyzed without the leg, it seems reasonable to suppose that, when both extremities are affected, it may now and then happen that the arm is more affected than the leg, and slower in recovering its motor power.

A third circumstance which merits attention is the rapid amelioration and speedy cure of the paralysis by the avoidance of depletive and debilitating measures, and the adoption of a tonic and restorative plan of treatment. If the active measures advised by some writers, on the theory of congestion of the spinal cord leading to organic change, had been employed in this case, the results would, in all likelihood, have been most injurious to the little patient. The treatment actually adopted was prompted by the idea that defective nutrition of the spinal cord, dependent upon a debilitated and anæmic condition of the system, was the leading element in the case. The result seems to justify this view, and was more favorable than could have been reasonably anticipated at the outset. In view of the unpromising constitutional condition of the patient, and the great extent of the paralysis, it was quite natural to apprehend a long continuance of the disease, with more or less resulting atrophy and deformity of the affected limbs. It will be observed that it did not become necessary to resort to electricity or other special treatment for the removal of the paralysis. The restoration of function seemed to be simply the result of improved nutrition.

ART. V.—*Horny Tumor Growing from the Eye-Lid.* By JULIAN J. CHISOLM, M. D., Professor of Eye and Ear Diseases in the University of Maryland, Baltimore.

The epithelial element of the common sebaceous cyst which orignates in the occlusion of an excretory duct, in a few rare instances, developes curious horny appendages, which are highly valued as pathological specimens. The small, hard, round elastic tumor, so common upon the scalp and the face, may remain dormant for years, giving so little trouble to those who possess them, as to excite no desire to get rid of them. Now and then they inflame and become painful, causing much uneasiness and anxiety. Should the surface of such a swelling ulcerate, the sloughing of tissue involving the entire thickness of the anterior

cyst wall, would form an ugly secreting ulcer, from the surface of which epithelial cells are being constantly thrown off. The mattering sore most frequently cleanses itself by an abundant watery exudation from the surface of the ulcer. Should rapid evaporation of this fluid occur, a scab is developed, which remains more or less intimately attached as a cap to the surface. The exclusion of air from the sore does not stop the formation of epithelial cells. They are the more rapidly produced on account of the irritating pressure of the scab, and by accumulating beneath it, gradually lifts the capping crust. As the scab increases in size and weight, the base of the soft tissues supporting it thickens into a prominent ring or vascular pedestal from which the horn grows. In this way a horn gradually becomes more elevated; and with its greater protrusion becomes firmer and darker as is dries with age. Before the growth has attained a large size, it resembles the spur of a cock. When more voluminous, it may either grow directly outwards with a broad base and more contracted apex, or it may change its direction and become twisted. It may then resemble the horn of a goat or sheep. Many years since I was called upon to remove a horn from the head of an old negro woman which had assumed, in its growth, this contorted shape. It was six inches in length and over two inches in diameter at the base. The base from which it grew was not destroyed; so that in the course of time, acting as a matrix, a second horn was produced. Had she lived long enough she would have become an extensive contributor to museums as a horn producer.

P. W., a healthy farmer, aged 65, has had, for ten years, a tarsal cyst of the upper left lid which, until recently, has given him no trouble. About twelve months since the surface ulcerated—the matter drying upon it. The scab stuck so firmly to the sore that it was painful to remove it. After one or two removals, as the sore showed no disposition to heal up, the scab was left alone. Slowly it became prominent, the older superficial layers drying and shrinking, with broad, softer base, until now, after six months' growth, it puts out like the spur of a cock from the surface of the upper lid, and is nearly three-fourths of an inch long. Where the horn attaches itself to the elevated vascular pedestal it is one-third of an inch in diameter. Its weight and presence cause drooping of the lid over the pupil and con-

stant pain in the eye and brow; to relieve which he seeks its removal. In dissecting away the matrix which extended nearly through the entire thickness of the lid, the horn was detached from the base. The wound was closed by sutures and healed up by quick union, so that by the second day all pain and discomfort had left it, and a radical cure was effected.

Clinical Reports.

A Case of Acute Rheumatism Treated by Salicylic Acid. By M. H. CRAWFORD, M. D., Asistant Surgeon United States Navy, Maré Island, Cal.

H. Surloff, sailor, aged 28 years, was admitted to the United States Naval Hospital, Maré Island, Cal., Monday morning, March 5th, 1877, from the Russian gun-boat "Toongous." His present illness commenced two days before his admission to the hospital with shivering and pains in the joints, which have increased in severity. When admitted to the hospital he complained of intense pain in the right shoulder, elbow, phalangeal, hip and knee joints. The joints on the right side of the body are all swollen, red, tender and very much enlarged. He lies on his back, unable to move, the least movement causing intense pain. Has an anxious and painful expression. Skin covered with a profuse acid perspiration; tongue moist and furred; bowels moved freely. Temperature when admitted was 102.5°F.; and in the evening was 104°F. The respiratory movements are hurried and deficient. His pulse is 102 per minute, weak and irregular. Urine diminished in quantity, high specific gravity and quite acid in reaction. Complete anorexia. Heart sounds are normal. He was placed between two blankets, and cotton lint, saturated with aconite, and chloroform liniment were applied to the painful joints. To have ten grains of salicylic acid every two hours, and ten grains of Dover's powder at bedtime. Food to consist of milk and starchy matter.

March 6. Passed a very restless night. General condition about the same. Has great pains in the joints. Pulse full and 100 per minute. Temperature 102°F. at 6 A. M. He has taken ten grains of the acid every two hours during the night. At 8 P. M. the patient complained of pains in the joints of the left side of the body, especially the knee joint, which is very much swollen and enlarged, and quite painful. Temperature and pulse the same as when last examined. Continue salicylic acid.

March 7. Patient passed a pretty fair night, and says he feels much better. Temperature fallen to 98.8°F. Pulse diminished in frequency and fullness. Respiratory movements normal. The intense pains in the joints have subsided. Appetite improved. Urine increased in quantity and not so acid in reaction. Heart free from any complication. Diminish the dose of salicylic acid to five grains every two hours.

March 8. Patient is convalescing very fast. Passed a good night. Temperature at 6 A. M. was 98°F. Pulse almost normal, with the exception of slight weakness. Respiration normal. Pain in all the joints disappeared; joints natural in size with a disappearance of redness and tenderness. He complained of slight pain in the cardiac region. Physical signs indicate a normal condition of the heart, with the exception of an anæmic murmur. Urine almost normal in color and specific gravity. Salicylic acid was omitted at 8 A. M. Continue to use nutritious diet.

The points of special interest in this case are the large quantity of salicylic acid taken without any poisonous effects, and the complete relief of pain in so short a time—there being a complete cessation of pain within thirty hours after the first dose of acid was administered.

March 9. Patient is doing well and continues to improve nicely.

April 2. The patient has entirely recovered—joints free of pain. Was discharged for duty from the hospital.

I have used salicylic acid in five cases of chronic rheumatism without producing any changes for the better.

Acute Articular Rheumatism Treated with Salicin. By R. G. WHARTON, M. D., Port Gibson, Miss.

I was sent for February 22d, 1877, to see a young lady 13 years of age, who had been complaining for two days of pain in the face, throat and ears. She was now in great distress—had slept none the night before. The right knee and ankle were excessively tender to the touch, very painful and a little swollen. There was also great pain about the præcordia, apparently in the heart. The pulse was 120; skin hot; face flushed. She had taken a dose of salts the night before, which acted well. Having never used salicin in the treatment of rheumatism, I determined to try its virtue in this case, and ordered a powder of 15 grs. of it, to be given every two hours, and lye poultice to be

applied to the knee. *Evening.* I found her better; said the first dose afforded some relief. She had taken only three doses when I saw her. There was no pain now except on moving, which caused great pain.

23d. Passed a much better night; still some pain; joints very tender to the touch. Continue the medicine at longer intervals. *Evening*—Worse; about 12 o'clock M., the left foot was attacked, also shoulders and breast. There was high fever; pulse 130. The foot was much swollen and red, and excessively tender. The right knee and ankle only painful on moving or on pressure. The tongue was coated with a white fur. I ordered the medicine to be given every hour and a half till she should get relief.

24th. Passed a good night; a free perspiration broke out early in the night; this relieved the pains. She can now move the limb with very little pain; slight fever; pulse 100. Continue the salicin every two and half hours. *Evening*—Better; some appetite; allowed her to take a few oysters, and to take the medicine every four hours.

25th. There was some return of pain in shoulders and in the heart last night, but at 9 A. M. this morning she is entirely free from pain, and there is no fever. Take four doses to-day.

26th. Well; no medicine.

This patient had a similar attack, as I was imformed by her parents, about four years ago, and she was confined to bed for two or three weeks. She has been entirely well ever since this last attack. About 300 to 320 grains of salicin were given, and there was no distress either to the head or stomach; on the contrary, she said that every dose made her feel better, and her convalescence was rapid.

Original Translations.

From the German and French. By Wm. C. Dabney, M. D., Charlottesville, Va.

The Action of Salicylic Acid and Salicylate of Soda when Given Internally.—Fr. Riegel, in the *Berliner Klin. Wochenscrift*, reports the results he has obtained with salicylic acid and salicylate of soda in 100 cases, most of which were typhoid fever. He could not form a definite opinion as to the action of those drugs on the course and duration of febrile affections. He states

that, in health, a dose which does not exceed 5 grammes (75 grains) produces no appreciable diminution of temperature. The unpleasant symptoms after salicylic acid, were vomiting, roaring in the ears with deafness, headache and giddiness. There were never any symptoms of collapse. Sweats, varying in amount, were frequently observed.

Riegel's investigations were made with especial reference to the elucidation of two points: (1), whether the temperature would be reduced by salicylic acid, and, if so, how far; and (2) the amount of lowering of temperature as compared with quinine. The measurements of temperature were made every hour or every two hours; the dose of the medicine was from 4 to 6 grammes. In typhoid fever there was a fall of two or three degrees in the temperature, which lasted from 12 to 18 hours or even longer. In those cases where baths were used at the same time with the salicylic acid, they (the baths) had to be repeated only once or twice in twenty-four hours; while in those cases where the acid was not given the baths frequently had to be repeated every two hours.

The duration of the fever was not influenced by the medicine; relapses occurred in about one-third of the cases, but *these* were usually of short duration when the acid was used. In phthisis, the action of salicylic acid was much more marked than that of quinine usually is.

According to Buss, the dose of salicylic acid must be twice as great as that of quinine to produce the same antipyretic effect. The investigations of Riegel show that salicylic acid produces a more decided and rapid depression of temperature than quinine, but the effect of the latter was more lasting in typhoid fever. In phthisis, however, the effect of salicylic acid lasted longer than that of quinine. The dose of the acid was 4 grammes; that of quinine 2 grammes. Riegel states, furthermore, that another advantage of the acid is that it can be given for a long time in these large doses, while quinine soon has to be suspended on account of its unpleasant effects.

His experience with salicylate of soda has not been so great as that with the acid, but he has come to the conclusion that it has as great an antipyretic effect, and is free from the irritating properties of the acid. It has the further advantage over the latter of being very soluble in water.

Schröder, in Petersburg, has recently treated 160 cases of typhoid fever with salicylic acid and salicylate of soda; has come to conclusions almost directly at variance with those of Riegel and the majority of writers on the subject. He says the antipyretic action of the preparation is doubtful—that there are fre-

quently ulcerations in the mouth, nose, stomach and upper part of the intestines. In doses of 20 grains, symptoms of collapse frequently occur; the pulse being very weak and rapid. The death rate in the 160 cases treated with the acid and the soda salt was 19.4; while of 211 cases treated by the "expectant" method and with baths, the death rate was 14.7. He considered the greater death rate in the former case due to the paralyzing action of the drugs on the heart.

In a discussion on the same subject in the *Versammlung deutscher Naturforscher und derzte in Hamburg* a short time since, which was opened by Dr. Steffen with a report of 30 cases in which the remedies had been used upon children in his own hospital practice, the speakers agreed as to their great antipyretic balm. Dr. Jacobi, of New York, took part in the discussion, and mentioned the case of a child, 13 years old, whose temperature, for a week, ranged from 104° to 104.9°, and in whom large doses of quinine and six or eight cold baths a day produced no effect, but whose temperature was very promptly lowered by the acid.

Professor Hennig stated that the use of the remedy during pregnancy endangered the life of the patient.

Subcutaneous Injections of Sulphuric Ether in Severe Adynamic Conditions.—An article on this subject, by Dr. Dupuy, recently appeared in the *Gazette des Hôpitaux*, and subsequently in the *Allg. Wien. Med. Zeitung*, for April 24th, 1877. Dr. Dupuy has recently tried these injections in a severe epidemic of typhoid fever as well as in other severe adynamic fevers; and as a result of his experience, he recommends their use in all severe "adynamic conditions" from whatever cause. He succeeded in rousing a cholera patient from the most profound collapse to a condition of convalescence by this means. A patient who was at the point of death from post-mortem hæmorrhage was rapidly restored by three injections of the ether given at short intervals. The author thinks it likely that in many cases the use of ethereal tincture of valerian or ethereal solution of musk would be preferable to the sulphuric ether itself.

"Metallo-therapie," or the Effect of Little Pieces of Metal Applied to the Skin in Hemi-anæsthesia.—In the year 1850, M. Burcq, a physician of Paris, addressed to the Academy of Sciences, a paper on the "influence of certain metals [applied to the surface] on paralysis of sensation." He claimed that certain individuals suffering with hemi-anæsthesia were relieved by the application of little plates of gold, while others were relieved by copper applied in the same way, and others yet by zinc. These statements of Dr. Burcq were treated with silent contempt by

some, and were severely criticised by others. He, however, continued to urge this discovery—for such it has proved to be—with all the energy of profound conviction; but it was not until the latter part of the year 1876 that he was able to bring his views to a test. At that time M. Charcot, the distinguished physician of the Salpetriere, consented to test the matter in this hospital; and on the 13th of January of the present year, he made a report to the Société de Biologie in which he sustained all the claims which M. Burcq had set up more than *twenty-six* years before. Since this first report of M. Charcot, a number of observers have, at different times, reported their experience in the matter.

On April 14th, a committee consisting of MM. Charcot, Luys, Dumontpallier, Landolt, Gellé and Regnard made a report to the Société de Biologie, of which the following is the substance:

If, in a patient suffering from hysterical hemi-anæsthesia, little pieces of gold, of copper or of zinc be applied to the skin of the affected region, the patient feels a creeping sensation, and, at the same time, a sensation of heat. After some moments there is a return of sensation, an elevation of temperature and an increase in muscular power. In the neighborhood of the point of application of the metal, there may be some uncomfortable sensations. The special senses are influenced in a similar manner. The committee have found a decided increase in the activity of vision and a diminution of the deafness on the affected side. These remarkable phenomena are not produced in all patients by the same metal; some are sensitive to gold, some to copper, and others to zinc.

It is very highly probable, also, that this action of the metals is due to electric currents which are established on the surface of the skin. M. Regnard has found that a current of the same strength as that produced by the metal, which is "active" in a given case, will produce the same effect as the application of the metal itself.

The same phenomena are observed in hemi-anæsthesia of cerebral origin, and strange to say, they are then made *more prominent* than in hysterical hemi anæsthesia.

In the course of their experiments, the committee observed a fact of great physiological interest. Just in proportion as there was an *increase* in the sensation (whether special or general) and in muscular power on the *diseased* side, was there a *diminution* of all of these at corresponding points on the *sound* side. There was, indeed, an actual *transfer* of sensibility. The committee make no difference with respect to the remarkable phenomena just mentioned between hemi-anæsthesia of cerebral

origin and that due to hysteria; but it has since been found that this transfer of sensibility only *occurs in hysterical hemi-anæsthesia*, and is never observed in that which is of cerebral origin.

MM. Landolt and Julmont drew especial attention to the following points in a case which they report in *Le Progrès Médical* for the 19th of May: (1), The return of general and special sensation, where no other treatment was used except the application of pieces of metal to the surface of the affected skin and mucous membranes, and this in a case of hemi-anæsthesia of cerebral origin which had existed without any variation for twelve years.

(2) The return of sensation to the whole of the affected side, although the metal was only applied to a very small surface.

(3) The persistence of sensation which, at the end of three months, had undergone no diminution.

(4) The simultaneous improvement in the hemi-chorea which accompanied the anæsthesia.

They state as points of difference in hysterical hemi-anæsthesia, the production of anæsthesia at corresponding points on the sound side and the temporary character of the improvement in sensation.

It is difficult, if not impossible, to explain the mechanism by which sensation is restored when the anæsthesia is of cerebral origin. M. Charcot supposes that a few only of the sensory fibres undergo a solution of continuity, while the others are thrown into a condition of torpor, from which they are aroused by the application of the metal. It is impossible to conceive, however, how a condition of "torpor" which had continued without any change for twelve years, could be relieved in a few moments in the manner described.

Proceedings of Societies.

MOBILE MEDICAL SOCIETY.

(Reported by W. D. Bizzell, M. D.)

February 24. **Puerperal Convulsions.**--Dr. Ketchum was hastily called six days previously to see a lady. When he arrived he found that a premature child, after a few pains, had been expelled; the placenta soon followed; the womb contracted well. There was no great amount of bleeding, and the woman expressed herself as feeling comfortable; she passed a comfortable day and slept well the succeeding night. The bowels were

rather loose—a trouble with which the patient was said to have suffered for some time—and she complained of some headache, On Monday morning, without any other premonition than this. she was suddenly seized with strong convulsions, and they were repeated quite frequently. The lady possessed a feeble constitution and was decidedly anæmic in appearance, so that the Doctor did not think venesection the proper remedy. Ordered some wet cups to be applied to the nuchæ and saw to it that they were well applied and that they drew freely; gave 20 drops of Norwood's tincture of veratrum viride every hour till the pulse came down. The patient had one convulsion while the cupping was going on, but none after the completion of the process, but continued in a deep stupor from which she could not be aroused. Lochial discharges normal; looseness of the bowels continued.

Tuesday Evening. The excessive discharges from bowels began to tell on the patient's strength; her skin became cool and the Doctor began to dread collapse. The continuance of the deep stupor caused him to hesitate to administer opiates. Prescribed bismuth subnitrate combined with small doses of Dover's powder, and injected into the bowels a solution of borax. This brought them somewhat under control. To combat the great depression he gave carbonate of ammonia.

Thursday. There was a partial return to consciousness—that is, she could be roused from her state of stupor for a few moments at a time. That night, however, she had a severe chill, followed by high fever; pulse 120; tenderness over the lower abdomen, and complete stoppage of the lochial discharge. Here, then, was an attack of acute metritis in a patient illy able to bear it. The condition of the patient obviously precluded the use of opium so much relied on in such cases; neither did he think it prudent to give mercury. Treatment: liberal feeding; blister over the abdomen, digitalis and carbonate of ammonia. To-day the pulse is 80, the tenderness over the abdomen subsiding, and she is entirely rational.

The Doctor remarked that the salient points in this case were the headache and bowel trouble previous to delivery, the easy character of the delivery itself, and the fact that the convulsions did not come on till nearly twenty-four hours after delivery; then, after a period of unconsciousness lasting four days, the more threatening symptoms subsided, only, however, to be superseded by others equally grave and threatening. The treatment demanded must be eliminating and at the same time supporting. And while he claimed no particular credit for the particular line of treatment pursued, he was gratified at the result up to this time. Why it was that the convulsions did not come

on during the progress of labor, or why they were so long delayed, he could give no very satisfactory reason, unless it be the ease with which delivery was effected. The action of the large doses of veratrum in this case, as in others in which he has tried it, was most satisfactory, and with the wet cups he did all that general blood-letting could have accomplished.

Dr. Gaines said he could recall three cases of convulsions coming on after labor. The first was in one of those apparently plethoric women, such as the modern authorities would recommend for venesection; the convulsions were promptly stopped by a free abstraction of blood. The second was a pale, sallow anæmic woman from the piney woods, had been in labor all night; sent for Dr. Owen, his partner, in consultation, thinking they would have to apply the forceps to deliver, but they decided to wait a while longer, and the child was born without assistance. Shortly after she was seized with convulsions. With Dr. Owen's concurrence, she was put on chloral and bromide of potassium, but they did no good, the convulsions coming on every hour. This case was also promptly relieved after a resort to the lancet. Dr. Gaines believes that a patient who has sufficient heart power and tonicity of circulation to bear up under 20 drop doses of the tincture of veratrum viride has the power to stand general blood-letting.

Dr. Fournier said that it was a well recognized fact, that in certain cases the prompt use of the lancet seems to promise more for the patient than any other remedy, and is almost indispensable. If we have an intense capillary congestion of the brain which has assumed very threatening proportions, we must promptly abstract blood whether the patient is plethoric or anæmic; if the blood is hemmed up in the venous system, the obstruction must be removed. We must not loose sight of the fact that venesection is a purely mechanical procedure, and may be equally as necessary when the blood is thin and broken down as when the opposite condition prevails. In certain cases of eclampsia puerperalis where the blood is not driven through the brain, but stagnates as it were, we must relieve that stagnation.

Dr. Ketchum said that he could not subscribe to the statement of Dr. Gaines that the heart which could bear 20 drop doses of tincture of veratrum every hour could equally well bear venesection. We must remember that in puerperal eclampsia we have an irritating poison in the blood, and it is the impression made by this on the brain which excites the convulsive action; and to rid the system entirely of this poison, it would be necessary to abstract all the blood in the body. He recognized the fact with Dr. Fournier that in certain cases venesection is the

most reliable remedy, especially on account of its prompt effect and one that could be used with safety in the cases of plethoric women; but in cases like the one detailed, the woman had no blood to spare, and he thought she stood a better chance of successful recovery if all the blood possible was spared to her—relieving the worst symptoms of congestion by the use of local bleeding, trusting to the veratrum to keep up the effect; trusting that if the immediate danger could be averted it would be an easier task for nature to eliminate from the system, to purge from the blood, than in a feeble and prostrated person to create new blood.

Dr. Toxey said he was glad the subject under discussion had come up, as these sort of cases seem to have been unusually frequent of late. So far as his experience went in the treatment of this disease, he must say that it coincided with Dr. Gaines'. He was called sometime since to see a woman said to be in labor; found her to be a small, feeble and anæmic person, and suffering from violent puerperal convulsions. It was late at night, and no assistance could be had. He immediately applied the forceps, and delivered without any difficulty. But as the convulsions did not cease, he tied up the arm and bled her, when the convulsive action ceased at once and did not return; she made an easy recovery. He remarked in this case that the pulse seemed to grow fuller and stronger as the blood flowed.

In another case he was called in consultation by Dr. Goode. The patient was a plethoric woman in frightful convulsions. He applied the forceps and delivered the child, when there succeeded a complete inertia of the womb, and there was the most alarming hæmorrhage he ever saw, which was only checked by the injection of the persulphate of iron. The convulsions, however, ceased—the result of the previous loss of blood.

Dr. Webb related the case of a patient, multipara, whom he had attended in several previous labors. The bag of waters had ruptured before his arrival and discharged a great quantity of fluid, so the woman said, but a very considerable amount flowed away after his arrival. The labor advanced well, the child was delivered and the womb contracted well. One hour after the completion of the delivery, she complained of intense pain in the calf of the leg, which gradually extended till it reached the body. The Doctor examined the pulse, found it feeble; the skin cool, with the general appearance of collapse. He hastily loosened the bandage, thinking, perhaps, the collapse was caused by concealed hæmorrhage, but he found the womb still pretty firmly contracted and the hæmorrhage slight, but he injected some fluid extract of ergot and sulphuric ether hypo-

dermically, as the womb was a little larger than he liked; just then she went into convulsions which lasted, however, only a short time, though she remained unconscious for several hours. There was no albumen in the urine and no cause that could be assigned for the convulsion.

Dr. Bizzell asked whether the patient was of a nervous temperament? Dr. Webb replied that she was not particularly nervous, but rather lymphatic, though she had suffered greatly from the affliction caused by the bad health of her husband, who is dying with consumption.

Dr. Gaines thought that this was of that class of convulsions known as epileptiform.

Dr. Ketchum thought they were hysterical convulsions.

AMERICAN MEDICAL ASSOCIATION.*

First Day.—GENERAL SESSION.—The twenty-eighth annual session convened in Farwell Hall, Chicago, Ill., 11 A. M., Tuesday, June 5th. The meeting was called to order by the President of last session, Dr. J. Marion Sims, of New York city, who introduced the President-elect, Dr. H. I. Bowditch, of Boston, Mass., who at once entered upon the duties of his office. Dr. Wm. B. Atkinson, of Philadelphia, permanent Secretary.

Prayer was offered by Rev. Bishop Wm. L. Harris, D. D. LL. D., of the Methodist Episcopal Church.

The address of welcome was delivered by Dr. N. S. Davis. There was a peculiar fitness in this selection, as he was the leader in organizing the Association, and has also been twice elected President of the organization. In the course of his remarks he said that fifty years ago the site of Chicago was a barren wilderness. There was not a foot of wall in the city that had not been put up since he came here to practise medicine. Chicago now stands as one of the emblems of the power of science. The speaker then dwelt upon the antiquity of the medical profession, which is, perhaps, older than any other recognized profession known in the history of the world. Its history could be traced back certainly for thirty consecutive centuries. Turning attention to the present occasion, he remarked that the introduction of the new President revived recollections of the first meeting of the Association thirty-one years ago in the city

* This report of proceedings is compiled from reports in the Chicago *Times*, *Tribune*, *Inter-Ocean*, *Evening Journal*. Cincinnati *Clinic*. Boston *Medical and Surgical Journal*, Philadelphia *Medical Times*, New York *Medical Times*, *The Sanitarian*.

of New York. Of the seventy-six gentlemen who then enrolled themselves as members, two-thirds have passed away to their last resting place. And now, as he cast his eye over the large assemblage, besides himself, he saw present only one of the original seventy six—Dr. Washington L. Atlee, of Philadelphia.

Dr. Norman Bridge, of Chicago, Chairman of the Committee on Registration, read the list of delegates whose credentials had been approved. [During the entire session of four days, over 600 members registered].

Drs. D. F. Boughton, of Mendota, Wis., W. H. Bunker, of Cincinnati, J. A. Reed, of Dixmont, Pa., D. Leavitt and —— Eichelberger, of Terre Haute, Ind., were made members, by invitation, of the present session.

The following named gentlemen were elected *permanent* members: Drs. C. K. Bartlett and E. W. Cross, of Minnesota; D. A. K. Steele, S. A. McWilliams, John E. Owen, Chas. T. Parks, E. O. F. Roler, Chas. L. Rutter, D. T. Nelson, J. S. Knox, W. E. Quincy, W. S. Nevins, M. P. Hatfield, Thos. Bevan, E. W. Sawyer and L. B. Montgomery, of Chicago, and S. M. Hamilton, of Harvard, Ill.

By invitation, the ex-presidents, vice-presidents and representatives from foreign societies were seated upon the stand as follows: Drs. S. D. Cross, J. M. Sims, J. M. Jones, F. Staples and N. S. Davis.

A number of letters of regret from absentees were announced.

Dr. Bowditch then proceeded to deliver the *Annual Address of the President*, selecting as his subject *The Past, the Present, and the Future of this Association*. Previous to 1847, a few State and local societies existed, but the masses of the profession were actually separated. The first meeting in 1847 was, therefore, composed of a body of heterogenous natures, which had no distinct bond to unite them, and was very hard to manage. But now some of the most valued friendships in the profession are due to these annual meetings, and the principle of union gains with each annual meeting. This Association, immediately upon the closure of the civil war became, indeed, one of the strongest ties between these States, and hence deserves unqualified respect.

But as to the present reputation of the Association, we must admit that our meetings, with perhaps a few exceptions, are rarely carried out with the entire co-operation of the *whole* profession, as they were in earlier years. The meetings have lost reputation in the Eastern and Middle [and Southern] States. Why is this? 1. The consciousness to which members were soon brought that their expectations as to what the Association

was to do for the profession were too high. Nothing could be more unwise or illogical than this position. Organized as is the Association, it seems vain to Dr. Bowditch to hope that it can carry on, to any great extent, fine scientific work. Indirectly and by small changes in the mode of proceeding, the Doctor thinks, we may give an immense impulse to science. 2. Because individuals smitten with the *cacœthes scribendi aut loquendi*, have been allowed to occupy too much of the time of the meetings. Many victims have pertinently asked themselves, "Does it really pay me to travel perhaps 1,000 miles to hear such debates or papers as these?" 3. Our Transactions are too bulky. It seems that the amount of real knowledge gained from them is inversely as the cubes of their bulk. 4. Led by violent partisans, the Association has at times unwisely passed resolutions through to be quite insulting to large communities; or pledging the Association to one opinion or another upon very mooted questions. 5. The Association is too democratic.

We can easily remove all prominent objections, if we choose, and put new vigor in the Association. Among the much needed changes is one in regard to the publication of papers read before Sections. We should publish nothing but that which, after being read at the Sections and approved by them, shall have been also submitted to the critical eye of experts, whose names shall be unknown, and whose decision shall be final in regard to the taking of any publication. Every paper published should either give something new to medical science, or else present an analysis or such a new or lucid arrangement of facts, already wholly or in part known, that the profession will be greatly aided thereby.

The Judicial Council, established in 1873, has been of incalculable value. He asks the reference to the Council of the following proposition: The propriety of having, as a standing committee, one on the procuring of scientific papers for each annual meeting from the ablest men in the various sections of country. Communications from men thus chosen would undoubtedly render the session much more interesting to all, and would raise the standard of medical education.

As to social meetings, Dr. Bowditch thinks we can not do better than follow the lead of Louisville in two respects: (1) Abstinence from all intoxicating drinks, and (2) inviting women to meet with us in social intercourse. He also asks whether or not this Association should not hereafter decline any entertainment, for our whole body, where intoxicating drinks are to be offered.

He suggests that every honorable, well-educated physician in the United States should be a member of this Association by

virtue of his being a properly qualified physician. In like manner, every member of the State Society should become a permanent member of this Association. He also favors smaller representation at annual meetings.

As to the Union of the American Medical Association with the Canada Medical Association, as was suggested at a joint meeting of committees last September, Dr. Bowditch sees no objection to occasional joint meetings of the two Associations.

As to the proposed relations of the Association to the Pharmacopœia, Dr. Bowditch does not advise the Association to publish a Pharmacopœia of its own, nor is he prepared to urge the adoption of any of the pharmaceutical councils yet proposed. He advises that a committee be appointed to consider every matter connected with the Pharmacopœia, and report at the next annual session. He urges, in conclusion, the importance of establishing State Boards of Health; he also proposes that every member should work to secure sufficient congressional appropriation to keep up the national medical museum and library. As to the interest accruing on the "Caldwell fund," which is to be paid as premiums to the best essay upon the "uterus and appendages," Dr. B. suggests that the subject should be made broader so as to include any gynæcological topic.

On motion of Dr. W. Brodie, of Detroit, thanks were voted Dr. Bowditch for his address, which was ordered to be published. The following committee was also appointed to consider and report upon the suggestions contained in the address: Drs. Brodie, S. D. Gross, Philadelphia; Eugene Grissom, Raleigh, N. C.; J. R. Smith, U. S. A.; J. K. Bartlett, Milwaukee, Wis.; J. P. White, Buffalo, N. Y.; J. M. Toner, Washington, D. C.

Second Day.—Upon nomination by Dr. N. S. Davis, the following were elected permanent members: Drs. F. C. Schaefer, G. E. Willard, Chicago; W. H. Fitch, Rockford, Ill.; N. Chapman, Hudson, Mich.; C. C. Hunt, Dixon, Ill.; G. G. Stone, G. Benedict and J. H. Stewart, of Minnesota; G. N. O'Brien, Plymouth, Wis.

The chairman of the committee to consider the suggestions in the President's address, reported, disapproving of each of them. But as the President stated he wished to make some further statements regarding the subjects involved, the report was tabled.

Dr. E. R. Squibb, of Brooklyn, read a paper on the revision of the United States Pharmacopœia, in which he severely criticized the last edition of the United States Dispensatory. Many recent improvements and important discoveries are not noticed, and useless foot-notes and explanations remain as they were in

former editions. He made frequent reference to a pamphlet by Dr. H. C. Wood, recently issued, in opposition to the revision proposed by himself. Under the present arrangement, the convention is to meet in 1879, when a committee on revision will be appointed, who are to prepare an authoritative Pharmacopœia, which no doubt will be defeated by all means legally available. There would then be two Pharmacopœias, if the American Medical Association attempts to put one in the field. As to that point, Great Britain once had three Pharmacopœias; and if there should come to be two in America, the doctrine of the survival of the fittest would, in its operation, take care of the best one. In May, 1880, a convention would meet in Washington which would be a convention, no matter how few its delegates, and it would have authority to revise the Pharmacopœia.

The hour having expired, Dr. Squibb, declining an extension, charges against Dr. W. F. Barr, of Virginia, were preferred and sent to the Judicial Council.

Dr. P. G. Robinson, of St. Louis, Mo., as Chairman of the Section, delivered the **Address on Practice of Medicine,** reviewing the progress made in this branch during the past year. Particular reference was made to the etiology of specific fevers, especially typhoid fever. Accumulations of sewerage, etc., have been shown to become the centres of contamination. An outbreak of typhoid fever attacked 56 out of 57 families of Lancashire, England, from the use of milk supplied from one dairy—the cows being watered at a stream which was polluted above by the excrements of a large number of workmen. Great care should be taken in regard to the milk supply of large cities, where children were especially liable to injury from its impurities. Attention was next directed to a case of hydrophobia, reported by Dr. Watson, of Jersey City, in the *American Journal of Medical Sciences*, for July, 1876, said to have been cured by woorara and strychnia, in which he discredited the diagnosis. Xanthium spinosum was also pronounced, after careful physiological experiment, a failure in the treatment of this uniformly fatal disease. The great question in cases of recovery is that of diagnosis. In Dr. Watson's report, several persons were represented as having been bit by the same dog, and a servant girl died of unmistakable rabies. In the other case, the disease was not developed until five days after the girl's death, and the fact of her disease was well known to the other patient. In his case, however, there was shown no aversion to water; and for that and some other reasons, a number of physicians held that it was not a true case of hydrophobia. The speaker then referred to the wonderful effect of salicin and salicylic acid in the treatment

of acute articular rheumatism. From the reports coming in from every quarter, there seems to be no doubt that a means has at length been discovered of alleviating this terrible disease. Dr. R. next referred to the value of counting the blood-corpuscles in certain affections, and quoted from several French authors. After some reference to physiological questions, the localization of brain functions, the functions of the corpora quadrigemina, the duality of the vaso-motor system, etc., Dr. R. remarked on several drugs that had recently been brought into use, making special reference to the use of gelseminum in the treatment of facial neuralgia, salicylic acid as an internal and external remedy, erythroxylon coca, etc. The address was useful, and referred to the Committee on Publications.

After a ten minutes' recess, Dr. James P. White, of Buffalo, New York, Chairman of the Committee, delivered the *Address for the Section on Obstetrics*. The most notable event of the closing year in his department was the formation of the American Gynæcological Society. Its transactions, just published by Messrs. Houghton & Bo., Boston, Mass., were of great interest to the medical profession, and were, in a high degree, promotive of the advancement of gynæcological science. He then called attention to a number of books and pamphlets just issued in relation to this particular branch of study—making special mention of the papers by Drs. J. S. Parry, of Philadelphia, J. E. Taylor, of New York, Maxson, of Syracuse, and Campbell, of Augusta, Ga. He noticed, with pleasure, the growing popularity of the obstetric forceps, and exhibited a pair devised by himself.

The Committee on Nominations of Officers for the ensuing year was then announced.

Third Day.—Necrological reports were presented from Indiana, Maryland, Missouri and the U. S. Army.

The Committee on Prize Essay reported that they did not consider the only essay which had been handed in as entitled to a prize.

The Judicial Council recommended, in regard to the question between the two Societies in Arkansas, that no change in the action of last year be taken, and that the application of the "old" body for representation be refused. They reported favorably on the admission of delegates from the Branch County Medical Society of Michigan, and against the admission of a delegate from the Hendricks County Medical Society. In the matter of certain charges, the Committee reported that inasmuch as the said charges had no bearing on the professional standing of the defendants, they should be dismissed. Report was accepted.

The Committee on Publications condemned the present system of stenographic reports of discussions in the various sections, but recommended that these reports be made in future by medical men who alone are qualified for the task. Of the Transactions of 1876, there were printed 1,250 copies, of which 1,207 were distributed. Of the Prize Essay by Dr. H. Culbertson, the same edition was published, of which 1,063 were distributed.

The Treasurer, Dr. Caspar Wister, of Philadelphia, reported that the publication of the Prize Essay cost some $6,000, leaving in the Treasury only $172.72. The Association has practically given each member $9 in value for $5 received.

The Librarian, Dr. Wm. Lee, of Washington D. C., reported, through the Secretary, that 187 distinct titles had been added during the year, making the total number of volumes now about 2,034, including pamphlets. In the way of foreign exchanges, the library is reaping most valuable benefits.

Dr. Ezra M. Hunt, of ———, N. J., Chairman of the Section on *State Medicine and Public Hygiene*, delivered the annual address on these subjects, which was referred to the Committee on Publications. His paper urges a more efficient sanitary police, and calls upon municipal authorities to furnish means to the local boards of health so as to strangle an epidemic at its birth. Medical colleges are urged to make the study of hygiene a part of their curriculum, as is to be done in the Johns Hopkins' College of Baltimore. He thought the profession of this country had reason to congratulate itself upon the rapidly developing sentiment favoring more perfect sanitation, &c.

Dr. E. R. Squibb resumed his report upon the subject of the *U. S. Pharmacopœia*. He closed by saying there were three courses for the Association to pursue, either of which would satisfy him: (1) Lay the whole matter on the table, leaving it exactly as it was, on the ground that the Association was not necessarily involved in revising the Pharmacopœia at all. (2) The Association might make a Pharmacopœia, such as it saw fit, allowing it to take its chances with others; he did not think this latter plan would eventuate a Pharmacopœia which would be accepted by the army and navy. (3) Let the Association appoint a committee to consider the whole matter in detail and report in 1878, on which occasion all the State Societies should send their delegates thoroughly instructed as to their ideas on the subject. Dr. Squibb added that he did not appear as the advocate of either one or the other plan; but preferred that the first course should be adopted, as he would thereby be relieved from further responsibility on this mooted question.

Dr. H. C. Wood, of Philadelphia, who had issued a pamphlet

n opposition to the scheme from which Dr. Squibb had read, poke at some length. He denied that he had spoken for the University of Pennsylvania, as had been charged. He regretted that personalities had been introduced into the discussion, and the motives of honorable men meanly misconstrued. Dr. George B. Wood, formerly President of this Association, but now in failing health, keenly felt the attack upon his character, and did not want the Association to put upon record that he had prostituted his position, and that conventions had been manipulated in order to allow him and Dr. Bache to build up their private fortunes out of the present Pharmacopœias. He hoped the Association would not say that the labor to which he had devoted his life was a failure. It was a point of honor with these gentlemen, and not one of money. He maintained that no action was necessary to be taken by this Association, and that the only thing necessary to make the Pharmacopœia better was for the physicians of this country to awaken to a realization of their duty to make it so, of attending the conventions and doing their duty towards improving the book. The proposition to issue a new Pharmacopœia meant the introduction of discord into the Association and confusion in the profession. This Association could not agree on so simple a matter as the nomenclature of disease; and it was not at all likely that it would be able to agree on such a measure as proposed by Dr. Squibb. The two Pharmacopœias might exist side by side, and the rule of the survival of the fittest would scarcely apply because one would inevitably flourish in one section of the country, and the other would prevail elsewhere.

Dr. Brodie, of Detroit, moved that a committee of five be appointed with full authority to examine into the whole question, and report the result at the next annual meeting.

Dr. N. S. Davis endorsed the sentiments expressed by Dr. Wood, and as a substitution for Dr. Brodie's motion, he moved that the whole subject be indefinitely postponed. Carried.

The Committee on Nominations reported as follows through the Chairman, Dr. S. D. Gross: For *President*, Dr. T. G. Richardson, New Orleans; *Vice-Presidents*, Drs. J. P. White, N. Y., M. Gunn, Ill., G. W. Russell, Conn., A. Dunlap, Ohio; Chairman *of Section on Medicine, etc.*, Dr. A. L. Loomis, N. Y.; Secretary, Dr. J. H. Etheridge, Ill.; *Obstetrics and Diseases of Women and Children*, Chairman, Dr. E. M. Jenks, Detroit, Secretary, Dr. H. O. Marcy, Mass. *Surgery and Anatomy*, Chairman, Dr. H. H. Smith, Pa.; Secretary, Dr. E. T. Easley, Little Rock, Ark. *Medical Jurisprudence, Chemistry and Psychology*, Chairman, Dr. W. Kempster, Miss.; Secretary, Dr. E.

A. Hildreth, W. Va. *State Medicine and Public Hygiene*, Chairman, Dr. J. L. Cabell, University of Virginia; Secretary, Dr. E. J. Marsh, N. J.

Place and time of next meeting, Buffalo, N. Y., on first Tuesday of June, 1878.

On the fourth day, the report of the Committee on Nominations was completed by making Dr. R. J. Dunglison, of Philadelphia, Treasurer, and Dr. Wm. Lee, of Washington, D. C., Librarian.

Dr. Squibb was permitted, upon his request, to withdraw his paper from the minutes of the Association.

Dr. T. M. Drysdale, of Philadelphia, was appointed a delegate to foreign medical societies; Dr. C. E. Wing, of Boston, was appointed a delegate to the Canada Medical Society; Dr. Lewis A. Sayre was appointed a delegate to the next meeting of the British Medical Association. Dr. J. Marion Sims was added to the list.

A list of charges was presented against the Michigan State Medical Society, the import of which was that it had aided and abetted the Michigan University, in graduating scholars in an irregular and exclusive medical course of study. Referred to Judicial Council.

Dr. Wm. B. Atkinson reported that circulars had been forwarded to the Executive of each State in which a health board had not already been organized, urging the need and utility of such boards and soliciting that the subject be brought before the respective Legislatures; that State Boards now existed in Alabama, California, Colorado, Georgia, Illinois, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, North Carolina, New Jersey, Tennessee, Virginia and Wisconsin. Resolutions had been introduced into other State Legislatures to effect the establishment of boards. The Committee asked to be continued. The report was ordered to be recorded.

The Secretary also read a report by Dr. Edward Seguin, of New York, and Dr. J. J. Woodward, U. S. A., on Uniformity in Medical Observation and Record, showing the paramount need for such uniformity, and recommending that the Association send special delegates to the International Medical Congress in Geneva, to advocate the adoption of uniformity of means of medical observations and records. The report was adopted, and Dr. Seguin was appointed chairman of the commission.

The minutes of the Judicial Council were entered of record without reading.

On presentation by Dr. Singleton, of Kentucky, it was resolved that the Association regards with pride the sentiments of

peace now steadily gaining throughout the country, etc., etc., which was seconded by Dr. Eugene Grissom, of Raleigh, and unanimously adopted with great applause.

The Kentucky State Medical Society recommended the "Morrison bill" favoring no tariff on quinine. Adopted, with instructions to the Secretary to transmit a copy to the National Congress.

Dr. J. J. Woodward, U. S. A., offered a resolution favoring the discontinuance of the so-called verbatim reports of debates in the sections, and that said reports be limited to the papers presented and recommended for publication, and such minutes as may be actually read before the Section. Adopted.

Dr. H. H. Smith offered a resolution of regret at the announcement of the illness of Dr. Geo. B. Wood, and tendering him the assurance of sympathy and continued regard.

In accepting the resignation of Dr. Caspar Wister, as Treasurer, a vote of thanks was tendered him for faithful performance of duties for 22 years.

The Nominating Committee recommended Dr. E. W. Brush, of New York, as Assistant Secretary, and the following are the Judicial Council in place of those whose terms of office now expire: Drs. J. K. Bartlett, Wis., F. Staples, Minn., E. Grissom, N. C., W. F. Robertson, ———, S. Silly, N. J., W M. McPheeters, Wis., A. Z. Woodward, Vt., P. O. Hooper, Ark.

A constitutional amendment was proposed which lies over until the next year, for the formation of a Section on Ophthalmology and Otology.

Dr. Bowditch temporarily resigned the chair to submit the following resolution: "*Resolved*, That the Association recommend to the Chairman of Sections at any place at which we may hereafter meet, the propriety of obtaining from our ablest associates in various parts of the country, papers to be presented to the Sections, and that due notice of the names of the writers be given in the medical journals before the meeting." He also moved that all papers to be published be submitted to the examination of experts whose names should be unknown, and only the most worthy should be published. After a lengthy discussion, on motion of Dr. J. P. White, of Buffalo, N. Y., the whole matter was referred to a committee of five, of whom Drs. Bowditch and N. S. Davis shall be two, to report at the next annual meeting.

Resolutions of thanks were adopted.

After Dr. Bowditch had introduced Dr. T. G. Richardson, the President-elect, the Association adjourned.

PROCEEDINGS OF SECTIONS.—I. PRACTICE OF MEDICINE. Dr. P. G. Robinson, Mo., Chairman; Dr. B. A. Vaughan, Miss., Secretary. **Treatment of Croupous Pneumonia.** In the absence of the author of the paper, Dr. A. B. Palmer, of Ann Arbor, Mich., it was read by Dr. N. S. Davis. The paper principally dealt with the effects of quinine in the treatment of acute pneumonia. After detailing the nature of the disease, and describing the various methods of treatment, Dr. Palmer submitted his particular method. When called to a patient within twelve or twenty-four hours after the chill, or at any time before any considerable exudate has occurred, he immediately gave from six to ten grains of quinine, together with from one-fourth to one-third of a grain of morphine, which almost invariably, in a short time, from half an hour to two hours, induced free perspiration and a reduction of the temperature. Then he repeated the quinine in doses of from four to eight grains once in from two to three hours, and unless all pain and special uneasiness was relieved, he added another but usually a smaller dose of morphine in four or six hours, but by all means continuing the quinine in any of the last-mentioned cases until from thirty to to fifty, and sometimes sixty, grains were given. Sometimes from twenty to twenty-five grains would be sufficient, given in these divided doses, or, if preferred, in doses somewhat smaller, but more frequently repeated. But as the large quantity was harmless and might be needed, he preferred to give at least thirty, and oftener as much as forty grains in from twelve to twenty-four hours. The effect desired, and certainly as a rule produced, was a decided reduction of temperature, a marked diminution in the frequency of the pulse, a decided moisture of the skin or free sweating, a slower and more easy respiration, a relief from pain and the feeling of fullness in the chest, a diminution of the cough and of the tenacious and bloody character of the expectoration. In short, not only was there a checking of the fever, but of all the evidences, general and local, of the pulmonary exgorgement and inflammation; the quantity of the medicine to be given depended much upon the completeness of the effects to be produced. The slight deafness and ringing in the ears, which might or might not result from these doses, was a matter of very little consequence, was almost always temporary, and should not influence the quantity given. A small quantity of quinine would produce these phenomena with some, while large doses would fail to do so with others, and neither in pneumonia nor in ague were they the measure of the medicinal effect of the remedy or an index of the quantity that would be required or borne. As a rule, all the treatment required after

this was a gentle laxative, or, if the tongue was much coated, a few grains of blue mass, followed in a few hours by a mild saline cathartic, and that in turn followed by some mild eliminative mixture.

The discussion following was participated in by several members. Dr. Murphy, of Cincinnati, denied that pneumonia could be aborted in the manner mentioned by Dr. Palmer, or by any mode of treatment. Dr. L. P. Yandell, of Louisville, considered malaria as the most prolific source of disease, and in this class of pneumonia, quinia is most useful. The opinion seemed to prevail in the Section that uncomplicated pneumonia in an otherwise healthy subject had a tendency to recover. At all events, the patient should be treated, and not the disease.

Dr. John Morris, of Maryland, then read a paper upon **The Effects of Remedies in Small Doses**, in the course of which he deduced the following: First, that the true physiological effect of remedies might best be obtained by the administration of small doses frequently repeated [doses of calomel, iron, quinine, digitalis, tartarized antimony, ipecac, opium, gelseminum, squills, ergot, etc.]; second, that medicines thus given were cumulative in their operation; third, that the effect of remedies is greatly increased by combination, the manner of preparation, the time and mode of administration, etc.; fourth, that large doses of medicine frequently acted as irritants, that they produced an abnormal state of the blood, as was evidenced by such conditions as narcotism, alcoholism, iodism, ergotism, bromidism, etc.; fifth, that more special attention should be given at the bedside to the influence of remedial agents, to the end that a greater certainty may be exercised in their prescriptions.

Dr. Morris asked that he might be allowed the privilege of printing this paper in any medical journal he might select, as having been read before the Section. The request was granted.

An Instrument for Alleviating the Distress of Asthma was exhibited by Dr. Bowditch, of Boston, which was designed by Dr. George E. French, of Portland, Me. It consisted of a support with bands of webbing so arranged as to keep the head and chest in a favorable position during violent attacks of dyspnœa. On motion of Dr. Squibb, a cut of the apparatus was ordered to be placed in the volume of Transactions.

The report of Dr. N. S. Davis on **Clinical and Meteorological Records** explained that the object of this work was to get at the actual etiology of acute diseases, a subject of which very little was known. It was sought to determine the relation between meteorological conditions and the origin of disease. He gave the figures in the case of bowel disease, by way of showing what

the work was. In his own practice, in 1875, he had 100 cases of bowel complaint, of which 14 began in June, 68 in July, 11 in August, and 7 in October. The mortality tables showed that deaths from bowel complaints were about alike in July and August. This discrepancy was explained by the fact that many persons who were taken sick in July do not die till August. In the same months of 1876, he had 93 cases of bowel complaints. Fifteen began in June, of which 9 were diarrhœa, 5 cholera morbus and infantum, and 1 was dysentery. Fifty-five began in July, of which 28 were diarrhœa, 14 cholera morbus, and 13 dysentery. Twenty-three began in August, of which 2 were diarrhœa, 4 cholera morbus, and 17 dysentery. Dr. Davis, of Chicago, after reading this report, also read corresponding figures from Davenport, Omaha and Cairo. In these four cities, there were in the practice of the physicians reporting, in 1875, 290 cases of bowel complaint, of which 44 began in June, and 150 in July, 67 in August, and 29 in September. Not a case began in the other eight months of the year. In 1876 the observers in three of the cities reported 169 cases, of which all but 4 cases began in the four months named. Of the 165 cases in those four months, 21 began in June, 83 in July, 43 in August, and 18 in September. The figures showed that more than half the cases n this climatic zone began in July.

Omitting cases of dysentery, there were in 1875, in four cities, 229 cases of bowel complaint, of whch 37 began in June, 132 in July, 40 in August, and 14 in September. Of the 61 cases of dysentery, 7 began in June, 18 in July, 21 in August, and 15 in September. In 1876, omitting dysentery, there were 122 cases, of which 24 began in June, 65 in July, 20 in August, and 13 in September. Of the 47 cases of dysentery, 1 began in June, 18 in July, 23 in August, and 5 in September. It would appear from these facts that the causes operating to produce diarrhœa, cholera morbus, and cholera infantum began in June and attained their maximum development in July, while the causes of dysentery attained their maximum in August. The causes of these diseases depended for their activity on conditions found only in the warm months.

Looking more particularly into the dates of the cases under examination, Dr. Davis showed that of the 14 cases in his practice in this city in June, 1875, all began after the 19th of the month. Of the 44 cases in the four cities beginning in June, 1875, only 5 began earlier than the 19th. His conclusion was that the bowel affections, so characteristic of this temperate climate, began invariably with the first week of continuous high temperature, and that every subsequent occurrence of several

days and nights of continuous high temperature caused new attacks to be increased in number throughout the month of July, less in August, and still less in September; that it was not simply the extreme of heat, but its duration, which determined the number of attacks; that this continuous high heat, to be sufficient in producing these affections, must follow a protracted season of cold; and that, if we compared these deductions directly with statistics of mortality, we should find them to conform in every particular, in that the high rate of mortality followed exactly the same line. That fact was regarded as one of great importance in connection with sanitary measures which were to be adopted for the protection of life in infants; preventive measures must strike with the first week of consecutive high temperature. These conclusions were corroborated by quotations from mortality tables.

Dr. Chas. Denison, of Denver, Col., read a supplement to a paper presented last year on the **Influence of Colorado Climate on Consumption.** A very full record of 6 unfavorable and 6 favorable phthisical cases treated in Denver was given by way of illustrating the effects of the climate upon patients, differentiated by variety of affection. The favorable influence of high altitudes was most pronounced in the incipiency of inflammatory and hæmorrhagic cases. In some cases, the symptoms were apparently aggravated by the rarefaction of the air which required them either to expand the lungs more fully at each inspiration, or to breathe more frequently. When the lung-tissue is much invaded by disease, this constitutes a positive contra-indication to sending patients to Colorado for treatment. Patients in advanced stages of phthisis are better at home, especially when heart complication exists; but the presence of cavity in the lung is not in itself sufficient to forbid recovery. "The truth is, the systemic influence of extensive disease in the first is often much greater than the slight inroads of phthisis in the third stage." The most generally interesting conclusion of the essay was that the generally received idea that consumption could only be successfully treated climatically during the first stages was not an absolute truth.

Dr. Bowditch, of Boston, regarded it as unadvisable to send patients away from home who had reached a certain stage of of phthisis. In cases in which the disease was not far advanced change of climate might be beneficial.

Dr. Ulrich, of Pennsylvania, believed the greatest benefit would come from a radical change in the surroundings of the patient, both mental and physical, and that such change could be effected at home.

Dr. Benton, of Cleveland, favored the high altitude of Colorado because it was inhabitable. Other high altitudes might not be inhabitable.

Dr. Kingsley, of St. Louis, referred to the fact that patients who went from St. Louis to Colorado, improved considerably, returned, and shortly after their return died because of the rapid development of the disease. The paper was further discussed by Drs. Scott, of Ohio, Heddens and Kingsley, of Missouri, and Steeman, of Ohio. The report was referred to the Committee on Publication.

Dr. H. A. Martin, of Massachusetts, read a paper on **Bovine Vaccination.** It first gave a historical sketch of animal vaccination, with a description of the process, etc. Animal vaccination was introduced by Dr. Martin in 1870. The alleged disadvantages are: (1.) That it was dangerously violent; that was an incorrect statement. It was also exempt from erysipelas. (2.) Communication of other diseases. There was no authentic case in which disease had been communicated except perhaps circinatus. (3.) That it did not take easy. That was not true. (4.) That it did not keep well. Animal virus would keep for an indefinite length of time. (5.) Vaccination with living lymph was an uncertain process. That objection was believed to be groundless, and that vaccination with fresh animal lymph, if properly managed, need not fail. (6.) It was expensive. That should not be so, and the government should establish stables and furnish an unlimited supply gratuitously.

The alleged advantages were: (1.) An unlimited supply of virus could be furnished with exceptional security. (2.) Impossibility of contamination of disease. (3.) It was always protective when vaccination and re-vaccination were practised. Humanized virus was not always protective.

The report was referred to a special committee consisting of Drs. Bowditch, Wheeler and Wigglesworth, of Boston.

Dr. L. D. Bulkley, of New York, read a paper on the **Recognition and Management of the Gouty State in Diseases of the Skin.** From a clinical standpoint, he desired to impress the value and necessity of recognizing this gouty state in many skin diseases. He considered the subject under the heads: (1.) The importance of recognizing certain skin diseases which are the early manifestations of gouty disease. (2.) The importance of recognizing the gouty state in connection with certain diseases of the skin. (3.) Management of the gouty state, especially in the early period when the skin lesions are most apt to manifest themselves. The evidence of the gouty state was considered in detail.

The paper was discussed by Drs. Hibbard, of Indiana; Cabell,

of Virginia; Scott, of Ohio; Ulrich and Duhring, of Pennsylvania. The paper was referred to the Committee on Publications.

Dr. F. N. Davis, of Chicago, reported the result obtained by an analysis of 965 cases of *chronic pulmonary disease* which had fallen under his observation during the year 1875. Referred to the Publishing Committee.

II. Section of Obstetrics and Diseases of Women and Children.—Dr. James P. White, Buffalo, N. Y., Chairman; Dr. Robert Battey, Rome, Ga., Secretary. Dr. W. H. Byrd, of Quincy, Ill., presented a paper, through the Secretary, on **Surgical Treatment of Some Diseases of the Female Urethra.** The first case cited was that of a vascular growth entirely surrounding the meatus of the urethra, which had been treated as a stricture. With the ecraseur and scissors, the growth was removed without difficulty. Subsequent dilatation of the canal cured the urethrismus. The case was illustrated by drawings of the parts, with the growth in *situ* and after removal. Other cases were cited to illustrate the method and ease of dilating the female urethra for vesical tenesmus, etc.

Dr. Kendall, of Quincy, stated that the sketch accompanying the paper was a fanciful one. The patient who had been previously under his care, had merely an ordinary thickening of the urethra from syphilitic deposit.

Dr. Marcy said that in one case he had removed a growth as large as a cherry. The removal was not dangerous, and three years had elapsed without a recurrence.

Dr. Smith, of Iowa, had removed such growths in two cases with the scissors, without difficulty or danger.

Dr. Jenks, of Michigan, remarked that in all instances these growths should be removed, and that no complicated instruments were needed to dilate the female urethra. He used conical rectal bougies of different sizes, until the finger could be easily passed.

Dr. Jackson, of Chicago, thought it often difficult to find these flat and but slightly elevated growths within the urethra. To facilitate the diagnosis and removal, he used a conical glass speculum, with a fenestrum, into which the growth dropped. The base of the growth he usually touched with fuming nitric acid.

Dr. Marcy, of Massachusetts, said that he had always used the method and speculum spoken of by the last gentleman, thinking that was the usual procedure.

Dr. Gilman Kimball, of Lowell, Mass., read a paper on **Extirpation of the Uterus.** After giving an account of the early history and results of the operation, and considering in detail the

observations of Péan and Caternault, the writer proceeded to examine the question: Is the operation ever justifiable? It was a sad comment that nearly nine in ten cases resulted in death. In Scotland all cases were fatal except the three successes of Keith. Death was caused by shock, hæmorrhage, inflammation and septicæmia.

A case was detailed which the reader said might be called a specimen case. A woman had presented herself to him with a hard, movable tumor, measuring seven or eight inches in its longest diameter, which was easily recognized as an interstitial fibroid. The patient was sent away, and told that nothing could be done for her. Two years afterwards she returned, but so changed that she was not recognized, nor was the diagnosis of the tumor at that time made out. The patient insisted upon an operation, which was undertaken under the conviction that the tumor was as likely to be ovarian as uterine. Upon opening the abdomen an unusual appearance was presented by the omentum, which had never before been met with by the writer, namely, innumerable cysts, varying in size from a robin's egg to a pea, everywhere studded the omentum. The omental mass was strangulated and cut off. The entire uterine mass was then removed; it weighed thirty-one pounds. The long pedicle was stitched into the lower end of the abdominal incision. Recovery was perfect at the end of the twelfth week.

In cases of malignant disease the result of the operation is always fatal. The question to be considered is this: "Is the operation of gastrotomy, as applied to fibroid or other benign growths of the uterus, a legitimate operation?" The answer given is, "The instances calling for operation are extremely rare, and it should be considered as a *dernier resort* when there appears to be nothing before the patient other than certain death without it." The fact that fibrous tumors of the uterus, after attaining a certain growth, may remain stationary for years, should forbid operation unless other symptoms imperatively demand it. Favorable cases are rarely met with that call for or justify gastrotomy. Some of the conditions that should forbid interference are:

1. When the constitution is broken down, gastrotomy cannot be otherwise than fatal.

2. When the weight of the tumor is thirty or forty pounds, the resulting nervous shock is so great as to debar the operation.

3. Hæmorrhage during or after operation constitutes a grave danger.

4. The adhesions, more or less intimate, with the surrounding parts, increase the risk to the patient.

5. When the disease develops downward, involving the vagina and filling the pelvis, it should not be interfered with.

Conditions favorable to operation are, small size of the tumor, freedom from adhesions, pedicle of good length, and the disease entirely restricted or confined to the abdomen. Operations on record have been almost universally performed under a mistake in diagnosis, the one reported by Dr. Kimball (*Boston Medical and Surgical Journal*, May, 1853,) being the first on record where the operation was undertaken for the extirpation of the uterus based on correct diagnosis. He has performed the operation twelve times, with six deaths, two of which were from septicæmia. In some he had introduced a drainage-tube through the *cul-de-sac* of Douglas, with good results.

As compared with ovariotomy, the latter operation is far more favorable; under certain circumstances, however, extirpation of the uterus is justifiable; but such cases are rarely met with.

Dr. Martin, of Massachusetts, spoke of the noted New England case, in which it was not known till after the operation that the uterus had been removed; the operation was recovered from.

Dr. Kimball, of Massachusetts, feared it might look like vanity, but the first operation which he did in 1853 was the first, so far as he knew, which was undertaken deliberately, the diagnosis being established. Altogether, he had operated twelve times, with six recoveries. One was an instance of pedunculated fibroid, and in another instance the uterus was amputated through its body. Trenholme has once removed the uterus on account of the rupture of a cyst, with symptoms of septicæmia; the woman died.

The writer spoke of one class of cases in which the operation was especially contra-indicated: those in which the growth of the tumor was downward, occupying the pelvic excavation.

Dr. Reamy, of Ohio, alluded to a series of five cases belonging to Dr. Thomas Wood, of Ohio, in which there were three recoveries.

Dr. Smith, of Iowa, had once performed the operation under an error in diagnosis. A trocar was driven into the intumescence which drained away some two ounces of amber-colored liquid; it was thought to be from an ovarian cyst, and gastrotomy was performed. The tumor was found to be uterine, and the mass was removed; it weighed fifteen pounds. Upon the upper surface of the growth, a collapsed cyst was found into which the trocar entered. The woman died on the sixth day.

Dr. Sims, of New York, regarded the paper a valuable contribution to the literature of the subject, and its appearance now as most timely, especially as some were carried away with the

idea that the operation should be performed much more often. He believed the operation was sometimes justifiable; but was not always so in Péan's cases. He since had performed the operation three times; in two instances the patients died of shock, and the third woman died of septicæmia; in this case there was sloughing of the broad ligament, and some eighteen ounces of pus were found in the abdominal cavity.

Dr. Jennings, of Arkansas, inquired of Dr. Kimball what percentage of cases died of septicæmia?

Dr. Kimball, of Massachusetts, replied that peritonitis and septicæmia usually co-existed. One case died from hæmorrhage; the rest died from peritonitis and septicæmia. In one case there was a most singular manifestation of septicæmia. The patient had survived three weeks, when a lump appeared in one parotid region, which grew so rapidly that the poor woman was asphyxiated.

Dr. Marcy, of Massachusetts, asked him how long after the recovery did the patients live.

Dr. Kimball replied that so far as he knew they were all now alive, except in one instance. In one case he had removed an ovarian tumor eleven years before ablating the uterus. In another subject he removed the ovaries with the uterus.

Dr. Atlee, of Pennsylvania, remarked that he was physically unable to take part in the discussion of this interesting subject, but he wished to say that, in his opinion, the operation should never be performed save when death was inevitable, and always as a *dernier resort.*

Dr. Byford, of Illinois, believed the operation was never justifiable except as a last expedient; and before deciding that the operation should be performed in a given case, we should separate the cases in which death is really imminent from those in which it is only apparently so. For instance, it is well known that these uterine tumors were often the seat of inflammation, when it would seem that the patient's life was endangered; but inflammation was a process by which nature lessened the tumor, sometimes caused it to disappear, and was often recovered from. The danger of death from exhaustion, and especially from pressure upon the neighboring vital viscera, were among the indications which might justify the removal of the uterus.

Dr. Grant, of Canada, had listened with great pleasure to the paper and the discussion. So far as he knew, the opportunities for observations upon this subject had been extremely rare in Canada. He had known of but two cases—one followed by death, and one followed by recovery.

Dr. Mary Thomas, of Indiana, knew of one instance of re-

covery from removal of uterus, but thought the operation should be resorted to with great hesitation.

Dr. White, of New York, rose to thank Dr. Kimball for his very able paper; very few men, however, who had had such success were as modest. In other words, the success attained by Dr. Kimball hardly warranted the conclusion that the operation was almost never justifiable, which had been expressed by so many present. Why wait till death was inevitable and the patient was moribund? Why not give the patient the advantage of the only hope at a time when the operation promises most? He believed in going forward. The early ovariotomists were greatly opposed, and the whole world was slow in accepting, what had been demonstrated in America, that ovariotomy was a justifiable operation. The operation under consideration had a great future. He declared himself conservative, but not timid. Three cases had occurred in his practice. Some weeks since he was sent for to do the operation, but the order was countermanded because the woman was supposed to be dying. The woman did not die, and he was again sent for and removed an immense fibro-cystic tumor. The woman died from shock. A year earlier the woman might have been saved by the operation. In another case the woman died from exhaustion. The third case was operated upon under an error of diagnosis. It proved to be uterine instead of ovarian, and the uterus was removed through the neck. This woman recovered.

Dr. Bozeman, of New York, read a paper entitled *Kolpokleisis* as a means of treating vesico-vaginal fistulæ. [A full article on this subject by the same author is to be found in the June number, 1877, of the *Obstetrical Journal of Great Britain and Ireland*, republished with supplement in this country by Mr. Henry C. Lea, Philadelphia, which renders a synopsis by us unnecessary.]

III. Section on Surgery and Anatomy.—Dr. Frank H. Hamilton, New York, Chairman; Dr. John E. Owens, Chicago, Secretary. Dr. J. T. Hodgen, of St. Louis, read a paper on the **Value of Extension in the Treatment of Fracture of the Femur.** He described the usual treatment for such a fracture, and pointed out the faults of plaster casts and pulley apparatuses. Lateral supports are valuable only to prevent angling. Continuous extension, by means of force not varying in power, was essential. It was not to be found in elastic extension, the name of which showed that the power could not be constant. Friction vitiated the pulley apparatus; oblique suspension is the only suitable method. The exact pressure required could be obtained by varying the obliquity of the suspending cord till the

patient was out of pain. In twenty-four hours a child five years old would learn the amount of extension under which comfort could be obtained, and would maintain it. Fortunately, the amount of extension needed was what the comfort of the patient required. The patient would naturally adopt his position to the lessening contraction of the muscles.

The paper set forth the following propositions: (1.) That in the treatment of fracture of the femur, continuous and equable extension is indispensable to the best results, is conclusively shown in the impossibility of maintaining with equal certainty accurate coaptation by any other means. (2.) That continuous and equable extension cannot be secured by lateral support. (3.) Continuous and equable extension can only be secured by suspending the limb, because in no other way can we avoid friction between the extending force and the part to be extended. (4.) Suspension furnishes the best means for allowing motion to other parts of the body, while perfect apposition of the fragments of the fractured thigh is constantly maintained, because there is no resistance offered to the movement of the limb in any direction in which the body may be moved, except in the direction from the point of suspension, and in every other direction the limb follows the movements of the body without the least friction.

The position taken provoked a spirited discussion.

Dr. Hingston, of Canada, offered the following, which was adopted: *Resolved*, that in fractures of the thigh, notwithstanding the judicious employment of every mechanical contrivance hitherto devised, shortening of the limb is of frequent occurrence.

Dr. W. F. Peck, of Iowa, offered the following resolution: "*Resolved*, That it is the opinion of this Section that shortening in cases of fracture of long bones is the rule in practice, regardless of any of the plans of treatment now in use."

A spirited discussion again followed the introduction of the above resolution, some strongly advocating its adoption, while others were equally strong in its opposition.

Dr. Hevans, of Missouri, did not think the passage of such a resolution advisable. He objected to any association voting upon a scientific subject.

Dr. Gunn, of Chicago, thought it ought to be carried. He did not look upon the question as one of science, but one of fact. Shortening of a fracture was the rule, and full length the exception. This was the purport of the resolution, and he hoped it would be adopted.

The resolution was adopted.

Dr. S. D. Gross read a paper for Dr. S. W. Gross, of Phila-

delphia, on *Stricture of the Urethra from Masturbation*. The histories of a number of cases which had fallen under his observation were given, showing the ultimate result of the above mentioned cause. Examination of the urethra by olive-pointed bougies of good size, enables the surgeon to locate and define a stricture which would pass undetected by the old metallic bougies. A new instrument for internal urethrotomy was exhibited, which, being olive-pointed, concealed a knife blade at its shoulder, by which a stricture could be incised to any desired extent. The paper was referred to the Publishing Committee.

Dr. Wm. T. Briggs, of Nashville, Tennessee, read a paper on **Medio-Bilateral Lithotomy**, which contained the following conclusions: 1. That the medio-bilateral is the simplest and safest, and, therefore, the best method of lithotomy. 2. That it is the method best adapted to a large majority of cases. 3. That it passes by the shortest and most direct route to the bladder. 4. That it lessens the chances of the surgeon's knife slipping out of the groove of the staff and passing into the space between the rectum and the bladder. 5. That by it, tissues of the least importance are divided. 6. That if the median line be closely followed, and only a limited section of the deep-seated parts be made, less blood is lost than by any other method.

Dr. J. W. S. Gouley, of New York, took the ground that there was no best operation; that each case must be studied by itself, and that each case indicated by itself what operation was the best to be adopted.

With regard to perineal lithotrity, Dr. Briggs made an incision, and subsequently dilated the opening with the fingers.

Dr. Gouley preferred to dilate by means of Dolbeau's dilator, to the extent recommended by Dolbeau, and then break up the stone. The Doctor also referred to the fact that the statistics proved the operation of lithotrity to be much more successful than the operation of lithotomy; the rate of mortality in the first being only one in sixteen, while in the latter it reached one in eight.

Dr. L. A. Sayre, of New York, read a paper on the *Treatment of Fractured Ribs by Extension and Expansion of the Thorax, and Retention by the Plaster of Paris Jacket*. Let the patient grasp a ladder or support above the head, by which the pectoral muscles are put upon the stretch and the ribs are extended. Having the bones in apposition, they are retained by the roller and plaster-jacket.

Conservative Surgery was the title of a paper by Dr. Quimby, of New Jersey. He described a case in which he removed one and a half inches of the tibia and fibula, and yet left a good limb to the patient.

Dr. Link, of Indianapolis, described some cases in his practice showing that the repair of bones did not depend upon the existence of the periosteum.

Dr. Hodgen, of St. Louis, believed that, inasmuch as the tibia and the tissues between it and the fibula were destroyed, the indication in such a case as Dr. Quimby's was to amputate, because of the danger of mortification, notwithstanding Dr. Quimby had saved the limb by an excision.

A paper by Dr. Benj. Lee, of Philadelphia, on *Suspension as a Means of Treatment in Spinal Distortion* was read by Dr. Woodbury, who exhibited an appliance designed by Dr. Lee called a "spinal swing for cases of curvature." This appliance Dr. Sayre regarded as one of the most valuable which had been devised for the treatment of the class of cases named.

Dr. S. D. Gross read a paper on the **Immediate and Proximate Cause of Pain.** The similarity of the nervous fluid and electricity was considered, and their possible identity suggested, modified by the play of the vital actions which everywhere exist in the organs and tissues through which the nervous fluid circulates. The fluid under consideration being generated by the brain, spinal cord and nervous ganglia, the nerves simply act as conductors of the impulse, pain being due immediately and directly to some obstruction to the transmission of the nervous current, thus causing an accumulation of nervous fluid at the site of obstruction. Pain can only be experienced in connection with a normal condition of the nervous centres concerned, or, conversely, when the brain and spinal cord are seriously affected there can be no perception of suffering whatever. Pain is modified, finally, by the structure of the part involved, and by the nature of the exciting cause.

Dr. Lewis A. Sayre presented a patient with **Reflex Choreic Manifestations due to Genital Irritation.** The patient was an idiotic and emaciated girl of 12 years of age, and for which he recommended clitoridectomy. He stated that the vulva was inflamed and congested, and invited the audience to notice the general spasmodic seizure produced when he touched the patient's clitoris. The demonstration was very effective, and the result as striking as could be expected from the subject of the experiment.

Dr. S. J Jones, of Chicago, presented through Dr. Andrews a report on **Recent Advances in Otology.** The paper discussed the practical value arising from the anatomical divisions of the ear, and gave a description of instruments designed for the diagnosis and treatment of ear diseases. The most frequent seat of disease was the middle ear, in consequence of its immediate con-

nection with the throat. Attention was drawn to the propriety of puncturing the drum under certain circumstances. The author believed that there were but few cases of catarrhal deafness which might not be relieved. It was difficult to conceive of such a thing as hereditary deafness. The doctor then passed to the consideration of the management of deaf mutes, and alluded to the prospect of alleviating their condition by the sign-language, and, still better, by lip-reading. Referred to the Committee on Publication.

Dr. Andrews then gave an abstract of a paper going to show that *incisions can be rendered painless by high velocities*, illustrating his idea by a peculiar incisor of his own contrivance.

Dr. Link, of Indianapolis, read a paper on the *Open-air Treatment of Wounds*, in which he recorded a very flattering result from this method of treatment. Referred to Publishing Committee.

Dr. Sayre said the resolution adopted Tuesday, stating that shortening of the limb is a frequent unavoidable result of fracture of the long bones, was a confession that the profession could not properly treat a fracture, and he protested against such a declaration.

Dr. H. I. Bowditch, of Boston, presented a paper on the *Relative Value of Incisions and Aspirations in the Treatment of Empyema*. Referred to the Publishing Committee.

Dr. Forsyth described his *method of treating fractures*, and illustrated it in the person of a young male patient.

Dr. Martin, of Massachusetts, spoke upon the subject of *Varicose Ulcers*, and exhibited an india rubber bandage which, in his hands, had worked a permanent cure in such cases, without any other adjuncts in the way of treatment.

IV. Section on Medical Jurisprudence, Chemistry and Psychology.—Dr. Eugene Grissom, Raleigh, N. C., Chairman; Dr. E. A. Hildreth, W. Va., Secretary.

Dr. John P. Gray, of Utica, New York, read a paper on **The Relations of Spiritualism to Medical Jurisprudence.** He took the Ward will case as the foundation of his remarks, and drew the following conclusions: (1.) Spiritualism must not be taken as evidence of Insanity. (2.) A belief in communications from the unseen world from supernatural messengers is not an insane delusion. (3.) The belief that mediums can communicate with the dead is not an insane delusion, for no evidence has been as yet presented of the truth of such communications having been made. They are mere assertions of the so-called mediums. (4.) The implication of fraud must stand against all such persons or

communications, as the dead party cannot be reached except through the so-called medium, and therefore the living party to whom the communication is made has no power of communicating with the dead. The whole is received simply through the medium. (5.) Such communications cannot be received in courts of law, as they are excluded by the rule of rejecting conversations not held in the presence of both parties. (6.) If Spiritualism is espoused as the result of the disease of the brain, being before repugnant to the belief and mental operations of the individual, then it is an insane delusion. Spiritualism must be received simply, under such ruling of the court, as undue influence. When it is a fraudulent influence, or conspiracy in the case of writs or contracts, then the writs and contracts made under such influence must be void. (7.) The most serious questions would arise where a person should attempt to commit homicide under the direction of the so-called spirits. The presence of a medium in such a case would suggest fraud and conspiracy. If the individual was a Spiritualist through life and before the time, no insane delusion can be claimed unless it can be found in a brain disease. He would have to stand in that case upon the same platform as ordinary criminals. (8.) Spiritualism can only be considered as an occasional delusion, and not as a cause or form of true aberration. It stands on the same footing as witchcraft, vampirism, etc. (9.) The medico-legal bearing must be determined by the facts in such a case, whether it is an insane delusion or simply entertained as a speculative belief with reference to the unseen world in the possible condition of men after death. Medical science can take no cognizance of it as a speculation more than it can of any other. Referred to the Committee on Publication.

Dr. Edward Seguin, New York, read a paper on **Intervention of Physicians in Education.** He maintained that new progress in education could not be expected from any great discovery in the methods of teaching, but must come from an active intervention of the physicians in the training of the children, which would act in two ways: First, by transferring as much as possible the teaching in the open air, one means of doing which would be the creation of garden schools, as proposed by Dr. E. Seguin. The execution of this plan would relieve the schools from the contagious ferments generated by crowding, and would considerably diminish the chances of sickness and of mortality among children. At the same time the pupils would learn from Nature what they see imperfectly represented in books, and gain by this immediate contact a love of Nature and naturalness which would react on their future avocations. For these garden-

schools would contain, not only classes of botany, natural history, &c., but classes of drawing, carving, and modelling from Nature, whence would issue generations of true artists and superior artisans.

But the second and most important part of the physician in education ought to be that of a keeper of the balance of the vital forces of the children. Each child must have his study-book where the account of his acquisition and expense of vitality should be kept. Physicians alone could register the idiosyncracies of children, measure the difference of build and of capacity of both sides of the body and of all the double organizations, and recommend accordingly certain forms of active or passive exercises, etc The accommodation of the ear and eye must be tested in order that each child occupy at school precisely the place, and use the printed types corresponding to his power of vision and audition. But, above all, the physician in charge of a school should register the movements of the great vital functions—the pulse, the respiration, and the temperature before and after various studies—in order to establish in figures the balance of what a child could spend in studying or could not, under the penalty of death from that too frequent disease, the scholar-meningitis. Referred to the Committee on Publication.

Dr. R. J. Patterson, of Illinois, read a paper on **Do Facts justify the Recognition of Moral Insanity as a Distinct Form of Mental Disease?** His conclusions were adverse to such recognition. His paper contained statistics from a large number of insane asylums, running back over several years, and showing a very marked diminution of cases of so-called "moral insanity." This proved either that the disease was becoming less frequent, or that the doctors were losing their belief in the existence of such disease and attributed the cases to other diseases. Dr. Patterson objected to the recognition of moral insanity as a distinct form of mental disease, because there were no cases in which it was shown that a person suffered from "moral insanity" while the intellect was perfectly rational. No person would suffer by the denial of this recognition. The term "moral insanity" not only does no good, but it does positive harm by enabling unscrupulous lawyers to set up a specious plea in behalf of their clients, especially in cases of homicide, in which their is no question as to the soundness of the intellect. The cases of Sickles, McFarland, and many others were cited here. And finally, very few of the highest authorities, medical or legal, recognized such a disease as moral insanity, and the plea of that disease is looked on with suspicion by experts.

Dr. John P. Gray, superintendent of the New York State

Lunatic Asylum, said the institution he had charge of had been cited by Dr. Patterson as refusing to recognize moral insanity. That was true so far as he was concerned, but his predecessor, Dr. Brigham, believed in it, and according to the asylum's records there had been two thousand cases of moral insanity in that asylum alone. He, Dr. Gray, had examined ten thousand cases of insanity without finding one that he regarded as a case of moral insanity. Dr. Brigham made three or four classes of moral insanity. One class was the impulsive, that characterized by a single manifestation, such as an impulse to commit homicide, with no other deviation from health. Dr. Gray did not believe such a case ever existed, but Dr. Brigham did. Dr. Gray would as soon think of impulsive diarrhœa as of impulsive insanity. The idea of a disease that comes in a moment and goes in a moment conflicted with all his ideas of physiology and psychology. One of the asylums Dr. Patterson cited, that at Longwood, reported in one year a phenomenal amount of "moral insanity." Probably "rum" would express all of it.

In a monograph by Despine, read a few years ago before the Academy at Paris, and for which a prize was awarded, the author pronounced all insanity as deep, ingrained immorality, ingrained by the patient himself, and held that insanity is not a sickness at all, but a disease of the soul.

Dr. Ray, the chief believer in "moral insanity," does not give the clinical history of a single case that occurred under his own observation at the Butler Asylum, Providence. Moral aberration was a matter of degree. There are persons who have a considerable amount of mental shrewdness, and yet whose moral nature is so perverted that they do not know right from wrong. The law puts such people into prison.

Referring to the subject of heredity, Dr. Gray said that persons who suffered from moral taint transmitted by parents might be held to be morally defective, but it was unjust to them and to the profession to regard them as diseased. The soul, he said, might be tarnished, but it could not be diseased, for what might be diseased would die.

Dr. Thompson, of Mississippi, made the point that moral insanity was believed in more formerly than it is now, and Dr. Ray has modified his statements in late editions of his own book.

Dr. Battey, of Georgia, said that in the asylums under his charge, where there were twelve hundred patients, there had during twenty-one years been no case regarded as moral insanity.

Dr. Knight said that if the term "moral insanity" implied the perfect soundness of all faculties except the moral faculties, there

was no such thing. In reformatories there were, he said, perfectly healthy boys who would rather do wrong than do right. Punishment they seek to evade, but if it is applied it does no good. They sleep well and eat well, and their minds seem bright enough. It is doubtful if these persons were morally responsible.

Dr. Seguin, of New York, believed in moral insanity. In idiot asylums children were received who were worse than idiots. They had an inevitable habit, a necessary impulse to sin. They had no symptoms of idiocy. They were healthy in body and bright in mind. He told of a boy who had on twenty occasions shut himself up in a room and set fire to the furniture. He knew he was doing wrong, but he had a necessary impulse to do it. The boy has been cured, and is now a perfectly good boy. The origin of moral insanity among children was a want or, better, a need. This boy had a need to see bright things, as some people have to speak constantly. This boy's insanity was a sort of sensory insanity.

Dr. Buck, of Canada, also believed in moral insanity. Two patients in his asylum were conspicuous examples of it. He had failed to detect in either any intellectual delusion, but their moral natures were so perverted that they could not live in society. One of these cases was a woman who was clever, neat, intelligent, and in perfect health, but she was subject to violent attacks of passion, and had excessively erratic tendencies. The other case was a man. His mind was sound enough, so that he had accumulated a fortune, and he was perfectly healthy; but if at large would maltreat his family, and commit other acts, making his existence in society impossible. Dr. Buck believed there were many other cases in his asylum where the initial departure from health was in the emotional nature. A very marked departure of the emotional nature involves the intellectual nature. He held that a moderate moral aberration constituted criminality, while excessive aberration constituted moral insanity. The intellectual nature affects the emotional nature but slowly, while the emotional nature has immediate and tyrannical power over the intellectual nature.

Dr. G. R. Buckham, of Michigan, read a paper on **Medical Testimony, with Special Reference to Cases of Insanity.** This paper set forth, in the first place, that physicians were not by education experts in such cases. Before graduation they were not required to study any particular branches in order to make them more "expert" than any other well-educated gentlemen. Regarding cases of emotional insanity, the Doctor did not believe that such a state of mind had ever been proved, and his natural inference was that there never was such a thing. A few

changes were suggested by the writer in the medical college courses to remove the evils of which he had spoken.

On motion of Dr. Buckham, a committee, composed of Drs. J. P. Gray, E. A. Hildreth and —— Knight, was appointed to consider the subject of expert medical testimony, and report at the next annual meeting.

Drs. D. F. Boughton, C. K. Bartlett and D. R. Brower were appointed a committee to revise the papers read before the Section, and to transmit them to the Publishing Committee.

Dr. A. N. Bell, of Brooklyn, read an elaborate paper on **Tuberculosis in Milch Cows and the Contagiousness of Tuberculosis by the Digestive Organs.** He spoke first of its nature, and then of the contagiousness of tuberculosis by the digestive organs. In considering the latter part of the subject, he spoke at length of the danger of imbibing tubercular consumption through milch cows, by the use of milk from the cows infected with the disease. The fact that tuberculosis was transmissible was an undoubted one.

The aim of Dr. Bell's paper was to point out the unerring certainty of death to animals fed upon animal tissues infected with tubercular deposits. A large number of experiments upon horses, dogs, cats and cows were cited from French, German and Italian veterinary pathologists in the prosecution of their researches upon the contagiousness of tubercle through the medium of tubercular meats. The results of these experiments pointed to the certain transmissibility of tubercle. The deductions from the paper were, that the strictest police inspection of public meat markets should be instituted, and tubercular meats unhesitatingly thrown away, and heavy fines and severe punishments should follow the sale of prohibited articles.

Dr. Bell's paper was referred to the Committee on Publications, with the provision that it might be taken up for discussion at a future meeting.

Dr. Comegys, of Cincinnati, read a paper on State Medicine, which particularly dwelt upon the necessity of rigid legal restrictions as regards admission to practice. The State should exercise over all physicians a supervision so careful that no unqualified person could by any possibility foist himself upon the community. In pursuing his subject, he remarked that gentlemen following the profession of medicine were, like clergymen, virtually debarred from the field of politics, which he did not consider an unmixed evil, by any means.

Dr. Elisha Harris, of New York, read a paper on

The Results of State Legislation on Public Health.—He said that until recently the application of sanitary laws had been

left to the local authorities. In nearly every State the legislation on public health matters had been obtained too easily, and at the suggestion of persons who could not properly give the precise form which both the construction of the statute and definition of methods or powers of their administration required. The excellent results of expert aid and counsel in the preparation of sanitary laws were amply illustrated in the States of Massachusetts, Rhode Island, Michigan, Minnesota and Wisconsin, and in the cities of New York, Boston, Providence, New Haven and Brooklyn. In every State there had existed general statutes for protecting human life from the contagion of small-pox or other pestilential disease; but even in these cases the administration of these laws had been perfect only when power to act had been conferred on medical officers acting as a Board of Health. For example, in New York a general statute empowered the Town Supervisor or Justices of the Peace to act as a local Board of Health. They had greater power than they knew how to exercise; but as the law provided no power and designated no person to set this authority in motion, action was not taken until the destroyer had already gained possession of the citadel. Another statute provided that the common school officer require every pupil to be vaccinated or to exhibit proofs of vaccination, and they were also authorized to appoint and pay vaccinating physicians. That law was entirely a dead letter; it had only been tried in two small cities, and proved a failure even there. The trouble was that this law, though good in itself, was not set in motion by competent authority. The same was true in regard to the laws for abating nuisances, draining, sewering, and regulating the sanitary wants of lodging houses. The time must come, and that soon, when this most important subject would force itself upon the attention of the people.

Dr. Sutton, of Indiana, was called upon to give his experience in dealing with *Trichinæ*. He advocated the passage of an act forbidding swine to run at large. In his town (Aurora) there was a very large distillery, where a great many swine and cattle were fed. Beneath their pens was an accumulation of filth which had been undisturbed for twenty years, and which was constantly disseminating disease. The City Council being selected by men interested in the maintenance of this disease-breeding establishment, it was impossible to procure the requisite legislation for its removal.

Dr. Harris had seen thirteen persons in one house suffering from trichinæ after eating uncooked ham, as many Scandinavians and others were in the habit of doing. He wanted immediate legislation, and hoped that some recommendation on this point would be made by the Section.

Dr. Ohr, of Maryland, suggested that if the Aurora distillery constituted a nuisance at common law, there was a remedy in the shape of a presentment by the grand jury of the county. This course had been adopted in his own town in relation to a tannery, and had been very successful.

The Section then adjourned.

SECTION ON STATE MEDICINE AND HYGIENE.—Dr. E. M. Hunt, N. J., Chairman; Dr. Williams, of Illinois, Secretary *protem*,—Dr. Wallace of Texas being absent.

Dr. Jas. L. Cabell, of the University of Virginia read an elaborate paper on **The Etiology of Enteric Fever.**—The paper comprehended an extensive correspondence on the development of typhoid fever, which, for the most part, attributed the origin of typhoid fever to filth, as is generally the case. But Dr. Cabell took up a number of cases where there was no end to filth, but typhoid fever was unknown. He believed the laws affecting germ life were far from being fully understood, and that the facts did not warrant the *de novo* doctrine of Bastian's theory of heterogenesis. Speaking of the tenacity of germ life, he said Indian corn, a semi-tropical seed, had been exposed for years in the Arctic regions to a temperature seldom less than fifty degrees below zero, and yet it maintained its vitality. The replies he received from correspondents indicate that typhoid fever was developed by excremental filth, by the use of milk from cans washed in tainted water, and by vegetable decomposition. Many correspondents cited much evidence to support the theory that decaying wood was far more likely to develop typhoid than was other vegetable decomposition. A soil saturated with organic impurities was fruitful in producing typhoid. But Dr. Cabell said that typhoid was to be found where none of these causes were at work, and he regretted that the belief in excremental poisoning as the great source of the fever had caused physicians to overlook other hardly less important, but almost unknown causes. A large number of the replies, cited many facts to show that there was an antagonism between typhoid and malarial fevers, and that typhoid is unknown where malarial fever is prevalent.

Dr. J. R. Black, of Ohio, read a paper on the **Laws of Heredity with Special Reference to the Transmission of Morbid Tendencies, Abnormal Forms, and the Effects of Intermarriage**—Improvements of domestic animals had long been deeply considered in all communities; and some, though weak, efforts had been made to improve the physical and mental condition of mankind. There was little wonder that the king of animals should be in his present degraded condition, for his physiological welfare had

been practically neglected. Either man was exhausted by excessive work, or dwarfed by almost entire inaction. Even when some portions of the system were properly looked after and developed to a high standard, other portions were degraded by neglect or inaction, which often resulted in the deterioration of the whole system. Efforts were indeed being made to improve this state of affairs. Children were fed with plainer food and made to take more exercise. The evil of hereditary taints and the evil of intermarriage were not acknowledged, or at least not heeded. In Connecticut and Rhode Island the evil of intermarriage among relations was so great that the people were gradually dying out, and the birth-rate among this class was growing less year after year. The result was, and the same course of action would only make it more so, that now nearly one-half of the population of such communities was spent in looking after the other half. In such communities the cases of inherited diseases of many kinds were fearfully numerous, and the cases where persons were entirely free from inherited diseases were very few; but few of such could be found who were entirely free of diseases inherited from parents. The speaker then referred to the statistics of hereditary diseases, and the various types of them. In mentioning the number of those afflicted with hereditary diseases, he stated that among ninety-three physicians and their wives, of whom reports have been presented, only fifteen males and eighteen females were reported as entirely free from an inherited predisposition to disease. A careful study had shown that there was no differential law of descent in reference to the sexes of those who were suffering from inherited diseases, or of the tendency to the limitation of a defect to the sex in which it originally appeared.

The reader of the paper then spoke of the curious fact that among the Jews, where full statistics had been taken, there was greater longevity than among the Gentiles, among whom they lived; that the average life of the former was eleven years longer than that of the latter. In describing special cases he described numerous interesting cases, in one of which the child, when in bed, moved its big toe about in the same way in which its mother had done. Like things begot like things, and the capriciousness that sometimes appeared, or which was thought to appear, was only apparent; it was not real.

From the statistics which the Doctor had been able to collect, the conclusion was reached regarding *consanguineous marriages* that the chances of the issue having well-formed bodies and sound minds were so small that the strongest legal enactments against them were justified.

In conclusion, the lecturer declared that the more the primitive phases of civilization were considered, the more apparent did the fact become that the somewhat violent hardships and privations to which life was then exposed fell with special force on the weak and helpless, and little, if at all on the vigorous, thus tending to the elimination of the one and the perpetuation of the other. It was apparent, further, that few persons possessed the strength of mind necessary to abstain from the perpetuation of the species, simply because they inherited a congenital disorder. Yet even this fact had an outcome not to be deplored. High intelligence, strong wills, and consistent behavior would survive, while feeble-minded ignorance and volitions unstable as water would carry the blood on to imperfection, disease, and extinction.

Discussion was participated in by Drs. Bell, of New York, Pratt and Lester, of Michigan, and others. Some of the speakers concurred in the opinion put forward by the essayist, while others thought his strictures relative to marriages between blood relatives were too severe.

The paper was referred to the Committee on Publications.

AMERICAN GYNÆCOLOGICAL SOCIETY.

The American Gynæcological Society held its second annual meeting in Boston May 30th, 31st and June 1st—the President, Dr. Fordyce Barker, of New York, in the chair.

Dr. John Byrne, of Brooklyn, read a paper on **Excision of the Cervix Uteri, its Indications and Methods.** The writer alluded to the three principal methods of treatment now generally practised, namely, the scissors or knife, écraseur and the galvanocautery. The latter was by far the best method of operating, although a dangerous hæmorrhage might ensue if the wire were overheated, and the parts in consequence cut too rapidly. In all cases the stump should be carefully examined, and any spot not thoroughly charred should be touched with the wire heated to only a dull red heat. He did not believe any marked narrowing of the cervix ever followed the use of the galvanocautery. He especially recommended excision of the cervix in all cases of hypertrophic elongation, or in cancer involving only the cervix.

Dr. Goodell preferred galvano-cautery in these cases, although he had seen fatal results from its use. In one case, a severe attack of peritonitis followed the operation; in two cases, a secondary hæmorrhage proved fatal. He had never seen any occlusion of the uterine canal follow the operation, although he

had seen a marked occlusion after the use of nitric acid, and even the simple introduction of a sponge-tent. He thought the use of the cold wire had, however, this advantage, that it better allowed the mucous membrane to be subsequently brought over the amputated surface. He objected to the use of the phrase cancerous cachexia, and did not believe that such a condition was necessarily a contra-indication to the operation. Moreover, the fact that the uterus is fixed in its position does not necessarily prove that the cancerous disease has actually invaded the adjacent tissue, but it may be due to the fact that a sympathetic inflammation has arisen in the adjoining parts. He had operated in one case of cancer of the cervix, in which a period of three years has elapsed without any return of the disease.

Dr. Scott did not think there was such frequent necessity for the operation as we were led to believe by the paper. When necessary, the operation by means of the scissors, a tourniquet being first applied, was far preferable to the galvano-cautery, which was sure to be attended by a marked constriction of the uterine canal. Simple, uncomplicated elongation of the cervix uteri was extremely rare. In cases where the operation is performed, the result too frequently follows that the uterus is left unsupported, and there is consequently a marked tendency to retro- or ante-version. Even if the hypertrophy be removed, he believed it would sooner or later return.

Dr. Byford did not believe the operation ever was successful, except possibly in cases of epithelioma. It undoubtedly relieved the symptoms for the time being, but the disease was sure to return. In many cases a satisfactory, although, of course, a temporary result, could be obtained by scraping out the diseased tissue.

Dr. Noeggerath said he had performed this operation forty-one times. In two cases in which he had operated with the scissors, he had seen a profuse hæmorrhage. In two cases performed by the galvano-cautery, a secondary hæmorrhage had taken place. Two of the operations had been followed by perimetritis. In two cases he had seen a marked constriction follow the operation. He believed that in all cases of areolar hyperplasia, the knife or scissors were far preferable to the galvano-cautery, since a greater reaction, which was very desirable in such cases, was apt to follow their use.

Dr. Dalton read a report of the examination of thirty-two sets of ovaries, examined with a view of ascertaining the **Relations Existing Between the Corpora Lutea of Menstruation and those of Pregnancy.** He considered that the corpus luteum had a very close connection with the process of menstruation.

He had found that it attained its maximum growth twelve days after the termination of the menstrual period. In cases of suspended menstruation, there were found in some cases corpora lutea, but they were much smaller, both in size and weight, showing, he thought, that the act of menstruation had a very marked influence on the growth of the corpora. He touched very briefly on the difference found between the corpora lutea of normal menstruation and those of pregnancy, stating that he had not in any way materially changed his views on this point. The paper was illustrated with colored drawings and models, and was of great interest.

The next paper was by Dr. Lyman, on **Dilatation of the Cervix Uteri as an Efficient Means of Arresting Metrorrhagia.** Dilatation for diagnostic purposes was sufficiently common; but he reported five cases of different types of metrorrhagia in order to call attention to the use of dilatation, not merely as a means of diagnosis, but as a direct method of treatment. He thought that the result in those cases justified the suggestion that possibly we have been too ready to substitute cause for effect, and that the strangulation at the inner os may have been the primary element in the production of hypertrophy of the mucous membrane of the body; and that the practical point for inquiry is, whether the real cause of metrorrhagia in all cases, whether of hppertrophy, hyperplasia, fibroid growths, etc., is not to be found in some peculiar condition of morbid innervation of the cervix, which strangulates the circulation, and the removal of which strangulation by laminaria tents arrests the flow as decisively as the removal of the bandage after venesection.

Dr. Storer said he had seen two such cases which had been entirely relieved by the dilatation.

Dr. Wilson believed that the arrest of the hæmorrhage was due to a compression of the mucous membrane, although it was possible that the constriction of the internal os may explain the hæmorrhage in part.

Dr. Skene read a paper on **The Principles of Gynæcological Surgery as Applied in Obstetric Operations.** His object was to bring before the Society for discussion the advantage of using some of the implements and methods belonging to gynæcology in the practice of obstetrics. He considered that with the use of the speculum, the operation of craniotomy could be performed in a much more skillful and surgical way, as the operator could be better able to see what he was doing, and would be much less likely to injure the soft parts of the mother, while at the same time the patient would be subjected to much less pain and inconvenience. He now always, in craniotomy, used Sims' speculum,

and took small pieces of the cranium away after having first perforated with a Braun's trephine. When it was necessary, even the whole child might be taken away in pieces without any fear of injury to the mother. He also recommended its use in those cases in which a dilatation of the cervical canal is desired, and always applied Barnes' dilators in this way. In cases of prolapse of the cord, and indeed in most cases of obstetric operations, he thought the use of Sims' speculum of great advantage.

May 31. Dr. Lusk read a paper on the **Necessity of Caution in the Employment of Chloroform During Labor.** He protested strongly against the popular idea that the administration of chloroform in obstetric practice was absolutely free from danger. In all cases in which a profound anæsthesia was produced by chloroform, uterine action was weakened, and in some cases entirely suspended. It was extremely dangerous to continue chloroform after the third stage, since there is great risk of a dangerous hæmorrhage taking place. He believed that sudden death from the action of the chloroform on the heart was as liable to occur in obstetric practice as in surgical operations.

Dr. Wilson dissented from the views of the writer as to the danger of using chloroform in obstetric cases.

Dr. Smith thought that chloroform was to be preferred to ether in those cases in which a rapid anæsthesia is desired.

The President, Dr. Fordyce Barker, then delivered the *Annual Address*. The most striking progress in gynæcology during the last fifty years he considered had been in the perfecting of our methods of physical diagnosis and surgical operations. Owing to the brilliancy of surgical gynæcology, medical gynæcology has naturally been left in the background. Ovariotomy is conservative surgery in the highest sense of the word. One of the objects of the society should be to protect the public from all hasty surgery. A strong probability, based upon scientific knowledge, that some good will follow will alone justify a surgical interference. The fact that since 1845 one hundred and two new pessaries have been invented shows how little the subject of uterine flexions and displacements is understood—how little are the relations between the uterus and other organs of the body understood. It is well known that the extremes of flexion may exist without any serious inconvenience. In cases of extreme flexion conception probably takes place from twenty-one to twenty-seven days after the last menstruation. It seems to be now well established that flexions in virgins cause no symptoms except a slight dysmenorrhœa. In some married women, in whom a flexion exists, all the uterine functions are found to be normal. In married women, however, these flexions may give

rise to serious disturbances. All mechanical treatment in these cases is unsafe and useless, unless all other pathological conditions are first relieved. Cases of laceration of the cervix are always attended with more or less sub-involution, and the treatment which completes the involution will do much towards relieving the eversion. The whole gist of what is known as Battey's operation is whether the symptoms complained of may not be removed by other treatment. It is now known that psychical remedies may cure the symptoms in some cases; may not other remedies be yet discovered which will remove the symptoms in others?

On motion of Dr. Goodell a vote of thanks was passed to the President, and the address was referred to the Publishing Committee.

The Secretary then read a paper by Dr. Van de Warker on **The Intra-Uterine Treatment of Flexions.** The writer most strongly recommended the use of the stem-pessary, and gave a detailed history of the instrument. In all cases it should be so short as not to touch the fundus uteri. The support should be in the vagina and, to a certain degree, self-adjustable to the motions of the body.

Dr. Peaslee was entirely opposed to the use of stem-pessaries in cases of retroflexion, since the difficulty could be rectified by other methods. In cases, however, of anteflexion there was no other way of keeping the uterus in its normal position. There was no danger in the use of the instrument, if properly applied and carefully watched. In all cases the uterus should be allowed a perfect freedom of motion. The instrument used should always be one which can be removed by the patient in case of threatening trouble. He thought that one of the best forms of pessaries in use was that which he had devised, and which was made of tempered whalebone. This will yield in every direction, and readily adapts itself to the desired position.

Dr. Thomas thought that there was always more or less danger in all instruments which were to be left within the uterine canal. He had, in several cases, seen the most serious results follow their introduction. Cases of irreducible anteflexion cannot be cured, except by a surgical interference. In cases, however, where it is possible to reduce the anteflexion at all, it is usually possible by care to reduce the displacement altogether. He showed the peculiarities of several forms of pessaries which he had devised for different uterine displacements, and explained in detail the methods of their application.

Dr. Noeggerath believed in the use of stem-pessaries, not so much, however, with a view of curing the dislocation, as of re-

lieving the symptoms. It is not possible to relieve an anteflexion by the use of the stem-pessaries. Out of one hundred cases he had seen but three serious accidents follow the use of the stem-pessary. The fact that the patient complains of pain or symptoms of inflammation does not prove that the pessary is the cause of trouble. The pessary should be introduced only at the patient's house. In cases of dysmenorrhœa, the use of the pessary is invaluable. He believed that all cases of anteflexion were congenital. The seat of the flexion is where the peritoneum begins to cover the body of the uterus. The pain at the menstrual period does not depend on the narrowing of the cervical canal at the point of flexion. A constriction of the os externum, as well as of the os internum, is often accompanied with pain. All operations with the knife which extend to the inner os should be in all cases avoided.

Dr. Goodell thought that there was great danger in the use of intra-uterine pessaries. The pessary should be one-half inch shorter than the uterine canal. The instrument should be used at the patient's house. In cases of retroflexion, the best results have followed their use.

Dr. Smith did not believe that anteversion was often *per se* a pathological condition. In retroversion the pessary is of especial value.

Dr. Atlee had recently occupied his time in removing rather than in introducing pessaries. He did not believe that the unpleasant symptoms which were so frequently spoken of could arise from a healthy uterus whatever the flexion or misplacement.

Dr. Wilson thought the pessary especially adapted to cases of retroversion. He did not believe at all in the stem-pessary, nor did he believe in a congenital anteflexion. Constipation is the most frequent cause of anteflexion. He believed that the best treatment for dysmenorrhœa and anteflexion consisted in the division of the cervix backwards from the internal to the external os.

Dr. Byford thought that the pathological condition accompanying a displacement was the primary difficulty, but that the flexion doubtless aggravated the difficulty, and he considered that the plan of internal treatment acted by removing the pathological condition. He had seen the best results follow the use of the slippery-elm bougie. This should be left in position for three to ten hours. By its use no sudden mechanical dilatation is brought about, and an influence on the vascular and nervous system of the uterus is exerted which brings about a most salutary effect.

Dr. Skene thought those cases in which Dr. Peaslee had recommended the use of a stem-pessary, where there was no in-

flammation, no dysmenorrhœa, and only sterility, were the very cases in which no treatment was needed; he believed in congenital anteflexion, and said that the infantile uterus is so weak that when taken out it is always ante or retro-flexed. If dysmenorrhœa were not due to a constriction, as Dr. Noeggerath had denied, he could not see what advantage would follow the use of a stem-pessary. He had tried various forms of pessaries, but had always found great difficulty in keeping them in position. After the pessary is removed he thought the flexion would invariably return. A retroflexion can be easily controlled by the use of what is known as an Albert Smith's pessary.

Dr. Smith did not believe that his pessary would keep all forms of retroflexion in place. He thought the pessary was, as a rule, too much bent.

Dr. Garrigues, who had just returned from Europe, said that in Denmark pessaries were used but very little. Martin, of Berlin, had never observed bad effects to follow the use of intra-uterine pessaries. Oldhausen, of Halle, used them very often, but had seen very serious effects resulting. Meadows, in London, used a glass intra-uterine pessary but had seen cellulitis follow its use. At a meeting of the London Obstetrical Society the flexible intra-uterine pessary shown by Dr. Squire had met with marked approval, since it readily adjusted itself to all the movements of the uterus.

Dr. Peaslee thought that the utero-sacral ligaments had nothing to do with retroflexion, as they did not influence the body of the uterus and could affect a case of retroversion only. In order to be of any service, a Smith's pessary must be introduced above the angle of flexion.

Dr. J. B. S. Jackson said he had never seen a case of congenital flexion. In infants, the uterus is mainly composed of the cervix, the fundus being comparatively undeveloped, and there he did not believe a congenital flexion could exist. Moreover, the arbor vitæ extended nearly to the fundus uteri itself.

Dr. Wilson confirmed the statements of Dr. Jackson, and said that although he had examined a large number of cases, he had never seen a case of congenital flexion.

June 1. The following were elected officers for the ensuing year: Dr. Peaslee, President; Dr. Chadwick, Secretary, and Dr. Mundé, Treasurer.

Dr. Goodell reported a case of *Vaginal Ovariotomy*. He strongly advised the removal of ovarian tumors, while yet very small, per vaginam.

Dr. Kimball dwelt especially on the importance of the establishment of free drainage. He thought that there was danger of an intestinal hernia in operations through the vagina.

Dr. Noeggerath had frequently operated by making an incision through the vaginal walls and attaching the walls of the tumor to the lips of the incision, and thus allowing the tumor to be emptied through the vagina.

Dr. Chadwick thought that there was necessarily great difficulty in making out a diagnosis of so small a tumor through the vagina. There was also great danger of having an uncontrollable hæmorrhage when the operation was performed through the vaginal wall.

Dr. Lusk gave the details of a case in which death followed the aspiration of an ovarian tumor.

Dr. Goodell said that the danger of intestinal hernia was largely imaginary. He believed that a microscopical examination of the fluid would greatly aid in making out the diagnosis.

Dr. Peaslee said that Dr. Thomas was the first to plan and execute the operation of vaginal ovariotomy.

Dr. Battey then discussed at length the question as to whether there was a proper field for the operation known as *Battey's Operation*. He gave the details of two additional cases in which he had removed the ovaries successfully, and challenged any one to produce a single case in which the symptoms for which the performance of the operation was recommended continued after the removal of both ovaries. He summed up his paper with the following propositions:

(1.) In those cases of absence of the uterus in which life is endangered, or the health destroyed by reason of the deficiency, the removal of the ovaries is at once the hopeful and the only means of permanent relief.

(2.) In cases where the uterine cavity or vaginal canal has become obliterated and cannot be restored by surgery, if grave symptoms be present, the removal of the ovaries becomes a last and only resort, and may be hopefully invoked in the case.

(3.) In cases of insanity or confirmed epilepsy, dependent upon uterine and ovarian disease, the operation is justifiable as a last resort and when other means of cure have failed.

(4.) In cases of long-protracted physical and mental suffering, dependent upon monthly nervous and vascular perturbations, which have resisted persistently all other means of cure, the question of a resort to the operation is to be committed to the prudent judgment of the conscientious practitioner in the particular case.

Dr. Trenholme desired to add to these propositions a fifth, namely, that the operation was called for in cases where a severe and exhausting hæmorrhage occurred with the monthly flow, in support of which he cited two cases in which the operation had been successful.

Dr. Peaslee thought that while the operation was profitable in cases where the menstrual molimen occurred with great suffering, and the mental powers begin to flag, yet it was not justifiable in many of the cases in which Dr. Battey considered it warranted. In women near the menopause, in cases of simple ovarian neuralgia, in cases of long standing, in all cases accompanied by a preceding inflammatory history, in all cases where pain is the chief symptom, he considered the operation unjustifiable.

Dr. Parvin did not think that the results obtained justified the operation, nor did he believe that the operation was possible in all cases for which Dr. Battey considered it indicated.

Dr. Goodell thought that possibly in cases of fibroid tumors of the uterus accompanied with great pain at the menstrual period, and in cases of a prolapsed ovary with acute pain, the operation might afford the desired relief.

Dr. Skene said that since even experts were unable in all cases to assign the cause for an existing epilepsy or insanity, the operation was unjustifiable in these cases. Frequently fibroid uterine tumors and cases of prolapsed ovaries get well of themselves; therefore he did not believe such cases were suitable ones for the performance of the operation.

Dr. Noeggerath cited two cases in which Professor Hegar, of Freiburg, had successfully performed the operation for the relief of an intra mural sub-peritoneal fibroid, accompanied by profuse hæmorrhage. The danger of a subsequent peritonitis was lessened the further the incision is made from the umbilicus; hence it is better to operate as near the pubic arch as is possible.

Dr. Wilson strongly advocated, in a paper, the use of a **Diluted Preparation of the Subsulphate of Iron and Glycerine as an Antiseptic** in the surgery of the pelvis. In operations about the cervix uteri, in intra-uterine fibroids, hæmorrhoids, fistula in ano, or fungous vegetation, this use of iron as an antiseptic is followed by the best results.

Dr. Parvin reported a case in which *tetanus had followed the removal of an ovarian tumor* the fifth day after the operation.

Dr. Kimball related a case in which the same fatal results had happened the twelfth day after a similar operation.

Dr. Chadwick gave the details of a case in which tetanus followed, on the seventh day, the removal of the uterus for a large fibroid.

Dr. Battey alluded to a case in which a fatal tetanus followed an abortion at the third month.

Adjourned to meet in Philadelphia the second week in September, 1878.—*Boston Med. and Surg. Jour.*, June 7.

Book Notices, &c.

Transactions of the South Carolina Medical Association. Charleston, April 10th and 11th, 1877. Dr. J. F. M. Geddings, Charleston, President; Dr. H. D. Fraser, Charleston, Recording Secretary. Pp. 130.

The President's address remarks that the Association is representative of only about one-seventh of the profession of the State. He fears the "languishing and downfall of this institution" unless members go hard to work to organize societies and to interest their friends generally in the major body. He thinks another danger threatens the Association in the strictures made by Dr. Sims on the Code of Ethics; and he refers to a number of points stated by Dr. Sims as particularly unfortunate, in his opinion. Our subscribers generally, we suppose, are aware that in our opinion the "Code" is far more the cause of abuse than use, and as such it ought to be abolished or thoroughly revised. The trouble is not with the remarks of Dr. Sims on the Code in the case of South Carolina; the apathy is the result of the late political embarrassments which, had they occurred elsewhere, as they did in Louisiana, would have paralyzed every effort of a scientific organization. Dr Geddings makes some excellent remarks in urging that coroners should be physicians; that a State Board of Health should be established; that some plan by which "the sick poor in the several counties outside of the cities and towns may be provided with medical attendance without continuing to be a tax and burden on the already overworked country practitioners."

The report of the Committee on State Medicine and Public Hygiene—Dr. Manning Simons, of Charleston, Chairman—is an elaborate paper of great value, in which attention is chiefly directed to (1) "certain principles or laws which have been evolved by the study of Public Hygiene; (2) the sanitary condition of South Carolina; and (3) suggestions for improvement by the enactment of laws for the preservation of health."

Dr. S. Baruch, of Camden, Chairman, &c., read the report of the Committee on *Tetanus*. The Chairman refers to two successes in his own practice since the war, and encouraging reports of the use of chloral and potassium bromide are made in many medical journals. "The dose and method of administration are very important. From 20 to 25 grains of chloral hydrate combined with 40 to 50 grains potassium bromide should be administered every three hours, keeping the patient constantly under

their influence by unremitting administration, night and day. When the patient is asleep, he should be aroused in five hours. Food and stimulants may be given *pro re nata*. In the judgment of the Committee, the striking effect is the gradual subsidence of the paroxysms, tranquil sleep, and the subdual of the acute disease." In one of Dr. Baruch's cases, "during a period of 37 days, this patient consumed a total of 8 ounces of chloral hydrate, and 12 ounces of potossium bromide, with no injurious effect except a slight opacity of the lens in both eyes, which curious effect has since been noticed by other reporters." Physostigma and tobacco were the only other agents the Committee deemed worthy of mention in this connection.

Dr. Heinitsh, in response to a general call for reports or discussion, reported a case of traumatic tetanus in which he had successfully used from 1½ to 2 grains of the extract of calabar bean every two hours during the day, and, at night, 30 grains potassium bromide, 15 grains chloral hydrate, and 1¼ grains morphia sulphate. This patient, five or six days after recovery from the tetanus, was attacked by constipation resulting from occlusion of the ascending colon by adventitious bands of organized lymph. Laparotomy was performed; death resulted.

Dr. T. G. Simons and others reported cases of risus sardonicus lasting for several weeks after recovery from tetanus.

Dr. S. Baruch, of Camden, read a paper entitled "A Neglected Point in the Medico-Legal Aspect of Strychnine Poisoning, with details of an Analysis." In the trial of the case, it was developed that it is a common opinion that strychnine is ordinarily used in the manufacture of common whiskey—an opinion, however, which Dr. B. shows to be in error.

Dr. E. B. Turnipseed, of Columbia, presented and explained the working of a new invention of his, which was either a urethrotome or a hysterotome, according to the wishes of the operator. Dr. Simons, however, thought it a very serious objection to the instrument, that it had no guide. Dr. Baruch disliked instruments which cut from before backwards, although this hysterotome was very ingenious. The instrument was further criticized by Dr. Kinloch, of Charleston, who considered it both unsafe and inefficient. He then exhibited and explained the workings of his lately improved urethrotome.

Dr. Middleton Michel, of Charleston, was appointed delegate to the Medical Society of Virginia, and the President was authorized to appoint delegates to any of the Associations inviting representation.

The next annual meeting will be held in Greenville, on the second Tuesday in April, 1878.

Again we have to regret want of space in which to make further notes of the pamphlets, &c., received than the mention of titles:

Transactions of the 79th Annual Session of the Medical and Chirurgical Faculty of Maryland. Held in Baltimore April 10–13, 1877. Dr. A. B. Arnold, Baltimore, President; Dr. W. G. Regester, Baltimore, Recording Secretary.

Transactions of the Mississippi State Medical Association. Held in Geneva, April 4–6, 1877. Dr. R. A. Vaughan, Columbus, President; Dr. Wirt Johnson, Jackson, Recording Secretary.

Report on the Surgical History of Mississippi. By Dr. W. W. Hall, of Geneva. Pp. 50. (From Transactions of State Medical Association, 1877).

The Diagnosis of Urethral Stricture by Bulbous Bougies. With Illustrative Cases. By Dr. J. Wm. White, Philadelphia. (From Philadelphia *Medical Times*, May 26, 1877).

Report on Dermatology. By Dr. Lunsford P. Yandell, Jr., Louisville. (From *American Practitioner*, June, 1877).

Surgical Anatomy of the Tibio-Tarsal Articulation, with Special regard to Amputations at this Joint. By Dr. John A. Wyeth, New York. (From *American Journal Medical Sciences*, April, 1876).

Prophylactic Treatment of Placenta Prævia. By Dr. T. Gaillard Thomas, New York. (From *American Practitioner*, May, 1877).

A Case of Abdominal Pregnancy Treated by Laparotomy. By same. (From Vol. I, *Gynæcological Transactions*, 1876.)

Pneumatic Self-Replacement of the Gravid and Non Gravid Uterus; also, *Calculi found in the Bladder after the Cure of Vesico-Vaginal Fistula.* Both by Dr. Henry F. Campbell, Augusta, Ga. (From *Gynæcological Transactions*, Vol. I, 1876.)

Management of the Insane in Great Britain. By Dr. H. B. Wilbur.

Specialty of Diseases of Women. By Dr. Clifton E. Wing, Boston.

Medical Organizations and their Value. By Dr. Wm. B. Atkinson, Philadelphia. Price 10 cents.

Analysis of 774 Cases of Skin Disease treated at the Demilt Dispensary during the year 1876, with Cases and Remarks on Treatment. By Dr. L. Duncan Bulkley. (From *New York Med. Jour.*, April and June numbers, 1877).

History of a Case of Recurring Sarcomatous Tumor of the Orbit in a Child. Extirpated for the Third Time, and ultimately causing the Death of the Patient. Illustrated. By Dr. Thomas

Hay, Philadelphia, Pa. (From *Report of 5th International Ophthalmological Congress*, New York, September, 1876. Imprint of Lindsay & Blakiston, 1877).

Syphilis and Chancroid. Brief History, Differential Diagnosis, Prophylaxis and Treatment. By P. H. Bailbache, Surg. U. S. M. H. Service. (From Annual Report of the Supervising Surgeon, 1875).

The Use of Large Probes in the Treatment of Stricture of the Nasal Duct. By D. Saml. Theobald, Baltimore. (From *Trans. Med. and Chirurg. Fac., Md.*, 1877).

Treatment of Anteflexions of the Uterus. Pp. 14. By Ely Vaend Warker, M. D., Syracuse, N. Y.

Explorations in Cell Pathology. By Robert S. Newton, M. D., New York.

Importnce of the Uterine Ebb as Factor in Pelvic Surgery Pp., 13. By Horatio R. Storer, M. D. Boston, Mass,

Disinfection of Yellow Fever as Practised at New Orleans, 1870–6 inclusive. By C. B. White, M. D.

Editorial.

University of Virginia--Graduates in Medicine.—Session 1876, '77. June 28th, 1877. P. B. Barringer, Charlotte, North Carolina; E. D. Boaz, Covesville, Va.; J. H. Bryan, Washington City, D. C.; H. P. Cooke, Charleston, West Va.; W. L. Ester, Brownsville, Tenn.; H. L. Fairbairne, Annan Dale, New York; J. B. Guthrie, Fisherville, Va.; C. B. Kohlhansen, Winchester, Va.; R. R. Lytle, Murfreesboro, Tenn.; E. G. Maupin, Portsmouth, Va.; Frank Nash, Richmond, Va.; J. F. Ward, Winchester, Va.; and J. G. Williamson, New Market, Va.

Every body concedes to the University that it is the best didactic medical college in the country. A more thorough drilling is no where enforced. The consequence is, graduates in the Medical Department of the University of Virginia achieve an enviable reputation wherever they settle. Merit is the sole standard of graduation here.

Our Advertising Department is unusually attractive at this season of the year, and should be regularly read over by subscribers, as these pages contain much information of value to them. In ordering of any of our advertisers, we respectfully request our friends to say that the advertisement was seen in this journal.

A large amount of matter has been crowded out of this issue.

The Buffalo Lithia Waters have undoubtedly produced as marvelous remedial results as any of the springs of which we have information. Their value is made indisputable by the testimony, not only of non-professional parties, but the most distinguished and able medical men of the country attest their efficacy in a long list of disorders. Dyspepsia of various forms, neuralgias, chronic inflammations of the abdominal viscera, and especially of the kidneys and bladder, ovarian and uterine derangements which are amenable to general treatment—all of these and the like seem to be benefited by the use of these health-restoring waters. We have been more impressed by the results of the use of the water of Spring No. 1, in the case of Rev. Dr. Leroy M. Lee, than by any other. In addition to the train of symptoms which he describes in a letter to Col. Goode, and published in the advertising department of this number *in front* of the reading matter, Dr. Lee had marked symptoms of locomotor ataxy which were rapidly becoming more decided before he went to the Buffalo Lithia Springs. He has returned so much improved in this respect that, had the editor been the only physician who had diagnosed this disease of the spinal cord, he would now be unwilling to stand by his diagnosis. This point is not brought out in the letter of Dr. Lee, but the result of treatment at the Springs in relieving so decidedly these symptoms of spinal lesion make the case, to us, one of the most remarkable that has ever fallen under our care, and which makes us recommend a resort to these springs in similar cases.

Bi-Sulphide of Carbon for Making Phosphorus Pills.—Mr. W. B. Addington, of Norfolk, Va., after taking a good deal of trouble to satisfy the wants of a medical friend—failing with chloroform, absolute alcohol and ether—tried bi-sulphide of carbon with excellent success. The required amount of phosphorus was dissolved in the bi-sulphide, in which it is very soluble. While the phosphorus was in perfect solution, he added an extract, either of taraxacum, gentian, quassia, or some simple tonic extract. The bi-sulphide of carbon being very volatile, quickly evaporates, and leaves no odor but that of phosphorus. By this method Mr. A. can make phosphorus pills as easily as those of quinine, while the thorough incorporation of the phosphorus is at the same time insured.—*Proceed. Ga. Phar. Ass'n*, 1877.

The Chicago Medical Journal for July comes to hand just as we are closing this "form." It contains the best reports of the proceedings of the late session of the American Medical Association that we have seen.

Registration of Prevailing Diseases.—A letter from Dr. W. P. Reese, Registrar of Vital Statistics, Selma, Ala., calls our attention to this useful system adopted in his place. At the close of each month, a condensed report is made by the profession to the Registrar of prevailing diseases, etc.; and from these reports the Registrar prepares his report. All the infectious diseases are reported at once. This registration of prevailing diseases is an important feature. How much more important it would be if adopted by the larger cities?

The Hygeia Hotel, at Old Point Comfort, Va., under the Proprietorship of Mr. H. Phoebus, has become the popular and fashionable summer resort. As to the matter of health, the following letter from the skillful and widely known medical officer, Dr. G. Wm. Semple, speaks more positively than anything we could say: "Hampton, Va., May 1st, 1877. H. Phoebus, Esq. Dear Sir: I will continue to attend as Physician, &c., at Hygeia, though so few are taken sick at the Hotel and invalids recover so quick there, that it brings me little profit." We know of no more delightful place to spend a good portion of the summer months. We invite special attention to the advertisement to be found in the pages immediately after the first inside cover page.

The Wythe County [Va.] Medical Society, at its annual meeting held in Wytheville, June 11th, 1877, elected the following officers for the ensuing year: Drs. S. R. Sayers, President; Wm. H. Bramblett, Vice-President; J. B. Pierce, Recording Secretary; J. B. Jordan, Corresponding Secretary; R. E. Moore, Treasurer. The following gentlemen were elected Honorary Members of the Society; Drs. J. B. McCaw and M. L. James, of Richmond, Va.; G. Wm. Semple, of Hampton, Va., and E. S. Gaillard, of Louisville, Ky.

Massachusetts Medical Examiners.—*The Boston Medical and Surgical Journal*, June 28th, says, that on July 1st the Coroner system disappears from Massachusetts, and the new plan goes into effect. The duty of viewing bodies and making autopsies devolves hereafter on "medical examiners," while the examination of witnesses, etc., is carried on in the courts. In Boston, there are to be two such officers, each with a salary of $3,000. Drs. F. W. Draper and F. A. Harris are the examiners for Boston—excellent appointments.

This plan is a great advance in medico-legal jurisprudence, and commends itself to the attention of other States.

Beatty's Pianos.—A gentleman who, some months ago, bought one of the $720 pianos of Mr. Daniel F. Beatty, Washington, N. J.—his attention having been attracted to the piano by the advertisement in the *Monthly*—writes us that the instrument looks well, sounds well, and that he is very much pleased with his purchase. Parties skilled in instrumental music who have carefully examined the instrument confirm the gentleman in the estimate he has placed upon the piano. The advertisement has not previously been noticed because we were anxious to have the testimony of parties with whom we are personally acquainted.

New Test for Salicylic Acid.—John A. Erstine Stuart, L. R. C. S., Edin, Musselburgh, N. B., in the *Practitioner* for June, 1877, says: "When salicylic acid is triturated with strong sulphuric acid, a crystalline film of a pinkish color is formed."

The International Medical Congress will convene in Geneva, September 15—Professor C. Vogt, Chairman of the Committee on Organization. The six Sections will be as follows; Medicine, Surgery, Midwifery and Gynæcology, State Medicine, Biology, and Ophthalmology and Otology.

The Hygiene of Catarrh is the title of a small work by Dr. Thomas F. Rumbold, 1225 Washington Avenue, St. Louis, Mo., to be issued in September next. The article in this number by Dr. Rumbold will form a part of the work.

The College of Physicians and Surgeons of Baltimore, has bought the College property, good-will, name, etc., of the Washington University School of Medicine, and will deliver the next course of lectures in that institution.

The Atlantic Monthly published by Messrs. H. O. Houghton & Co., Boston; is our most valued general literary exchange. Although excellent when it was begun in 1857, each successive number seems to be an improvement on its predecessor.

Messrs. Geo. Tiemann & Co, Surgical Instrument Makers, etc., New York city, have lately supplied us with a complete set of conical pointed, nickel-plated (Van Buren's case) bougies which are elegantly made. This house is so well known, and their articles of manufacture so excellent that it is unnecessary to do more than to call attention to their advertisement.

The Reply of Drs. Peaslee, Emmet and Thomas to the pamphlet of Dr. Sims comes to hand as we are closing the last page of this number. The "reply" of these gentlemen places them in an unfortunate position.

VIRGINIA
MEDICAL MONTHLY.

VOLUME IV—No. 5. WHOLE NUMBER 41.

RICHMOND, AUGUST, 1877.

ART. I.—*Report on the Experimental Use of Amyl Nitrite in Ten Cases of Pertussis.* By GEORGE BAYLES, M. D., of New York. (Read before the Medical Society of the State of New York, June 20th, 1877, and by vote of the Society referred to the Committee on Publications for incorporation in the printed Transactions).

In the *American Medical Weekly* of November 18th, 1876, mention is made of the original contribution of Dr. Sawarowsky to a St. Petersburg medical journal under date of September 30th, 1876. The quotation reads as follows:

"Dr. Sawarowsky writes to a St. Petersburg medical journal recommending the inhalation of a mixture containing ʒj of chloroform and three drops of nitrite of amyl in whooping-cough. Besides this, he administers for three days, at intervals of two hours, a powder composed of the cyanide of silver and pure argil or alumina—one-twelfth of a grain of the former and three grains of the latter. He likewise advises prohibiting the use of articles of food and drink that are hot or quite warm. The writer says that under this plan of treatment the most obstinate cases have yielded within a few days."

On April 12th, 1877, my friend, Dr. P. B. Porter, of New York, called my attention to the article in the Louisville journal relating to the views of the Russian physician. Dr. Porter has, for several years past, been studying the various methods of treating pertussis; but at the time of reading his latest paper upon this subject, he did not know that amyl had ever been used. I should suppose, therefore, that the Louisville journal was the first American publication to notice the Russian article.

All the cases embraced in this review had passed from under clinical observation previous to March 22d, 1877. This was nearly a month before Dr. Sawarowsky's note came to my knowledge. At the time of making my experiments, I had no idea that the value of this agent had been tested in whooping-cough. Had I known it I should have been prepared to verify the findings of others. As it was, I was obliged to pursue what, to me, were initial inquiries.

Whenever experimental courses are adopted, they should, I think, guarantee a practical reinforcement of the benefits of the palliative measures held in esteem in common practice, for these cannot be wholly set aside during operations of an experimental character. It does not follow, as a matter of course, that the real results of tentative practice under such circumstances are masked and unrecognizable; for with the work of patient observers who have faithfully recorded their experience in cases numerous enough to prove anything and show precisely how much may be expected of their respective methods, it is never very difficult to estimate how much more any supplemental means may have accomplished. It was, therefore, in the light of an aid to trusted palliatives or as a new element of power in alliance with other approved alleviating agents that the peculiar properties of the nitrite of amyl were tried in this disease in conjunction with some of the usual remedies. The best endeavors of the physician are directed towards assuaging the intense force of the paroxysm of cough. Until comparatively recently, nothing in medical science had been discovered sufficiently potent either to avert the invasion or abridge the progress, in any appreciable degree, of this distressing malady. To abate the violence of the chief symptom, ever so slightly, will be to effect an excellent result, as naught but the hard exhausting cough need be regarded either as an element of danger or of special inconvenience in this disease. The complications which sometimes arise in certain of the unfavorable cases of pertussis are always induced and sustained by this one super-dominant symptom, whatever may have been the predisposing systemic conditions.

In the cases to which I now ask your attention, the usual domestic remedies proved as ineffectual as usual, and the whoop was generally established when the physician was called.

In every instance, save one, regular treatment began with quinine, according to the suggestions of Professor Binz, of Bonn University, and practice of Dr. B. F. Dawson, of New York.

If I desired to discontinue the use of quinine, I would occasionally use the chloral hydrate, according to the suggestions of Ferand, Ridger and Karl Lorey and the practice of Dr. P. B. Porter, of New York.

Treatment, however, invariably drifted into the use of the amyl nitrite according to suggestions not derived from any outside source. These remedies all tended toward accomplishing the desired object, and though each gave evidence of its prime utility, it was reserved for the amyl to be the most promptly remedial.

In quinine there appears to be a real antidotal action to the specific root-element of this disease (whatever that may be); therefore, an under-current of quinine, so to speak, kept up throughout the progress of the disease, cannot but be of advantage. Chloral is a sedative nervine of very efficient action, and beneficial in an eminent degree where nervous excitement is intensified by the apprehension of an approaching paroxysm of coughing This agent, therefore, was the most serviceable in the cases of the elder patients.

Amyl comes in as a direct anticipatory measure for the relief of the cough as to its frequency, and also its pacification as to paroxysmal energy. From this point on, the cases must speak for themselves, and, I think, they will be found to illustrate the positive value of nitrite of amyl in allaying the violence and limiting the duration of the cough of *pertussis*.

Case I.—Anna B., 10 months old; nursing from breast. *December* 10th, 1876. Has had cough for two weeks, and within three days of my first visit the whoop was recognized. Ordered a solution of sulphate of quinine, five grains to the ounce of water. Dose, half a teaspoonful every hour.

Dec. 12. Found an appreciable moderation of symptoms, though paroxysmal coughing is steadily recurrent. Decided to continue the quinine and to administer nitrite of amyl by inhalation. One minim was the allowance. The drop was allowed to fall upon the bottom of the interior of a tea-cup which was inverted over the mouth and nostrils of the patient, but not so closely that the edges of the cup would come in contact with the surface of the skin. This was done the instant the period arrived for the violent cough to be repeated. The cough com-

mencing and gathering force was a signal to use the amyl. The prompt effect was so to modify the paroxysm as to silence the peculiar sonorous inspiration, repress the vomiting, and to allow the cough to assume the character of that which belongs only to acute bronchial catarrh.

Three visits were made, each two days apart, and finding the report at the last visit to be about equivalent to perfect recovery, I considered the patient cured. At a subsequent time I was enabled to learn that there was no return of the paroxysmal cough after my visits had ceased, and the amyl was wholly discontinued after being used one week.

In this case the amyl seemed to put an effectual check upon any tendency for the peculiar cough of pertussis to gain duration by the mere force of habit.

CASE II.—William T., aged 5 months; nursing from the breast. Convalescent from cholera infantum, with which he was attacked late in the summer. *December* 23d, 1876. Patient weak and sickly from debility of the organs of assimilation. Common cough had been followed by a cough with whoop two or three days previous to my first visit. Patient has coughed altogether from fourteen to twenty days. The paroxysms are very alarming, considering the tender age of the patient and the general lack of constitutional vigor. Ordered a solution of sulphate of quinine, five grains to the ounce of water, giving half teaspoonful doses every hour.

Dec. 25. No noticeable improvement; paroyxsms every half hour (or rather less), attended by vomiting and discoloration of features. A diarrhœa has set in which threatens to prove fatal. Stopped the quinine and ordered

℞. Argenti nitratis.....gr. ss.
Aq. puræ.....℥j.
Tinct. opii.....gtt. x.—M.

S. 20 drops after every watery stool, and the same given in ℥j parts per enema of starch or gum water. Brandy cloths (hot) to the abdomen. Dry flannels to the rest of the person, and woollen socks to the feet. Within twenty-four hours the diarrhœa was restrained and the strength a little revived. The paroxysms of cough had become less violent and possibly less frequent.

Dec. 26. Found patient a little improved, though the paroxysms are still very severe and occur about once an hour. The nitrate of silver had been of benefit to the intestinal track, and I thought I could observe that it had done something to allay the force and frequency of the cough.

The iodide of silver has been used with great benefit by Dr. Robert Bell, of Glasgow, in pertussis, and it is probable that the nitrate of silver would have some effect in the same direction. The silver salt doubtless did something to prevent reflex action being conveyed to the pulmonary branches of the pneumogastric nerve.

Dec. 27. Continued treatment without change.

Dec. 28. No diarrhœa. Cough still very violent, but paroxysms not so protracted or recurring so often. Began the use of amyl nitrite, giving one minim doses by inhalation. The effects described in Case I were repeated in this case.

Dec. 29. Quinine was resumed and nitrite of amyl continued. In a week more I ceased attendance, as the cough had rapidly resolved itself into the variety characteristic of ordinary bronchial catarrh.

Case III.—Emma L., 12 years old. Exposure to pertussis occurred in school. Patient had coughed two weeks and whooped three or four days when my attention was called to the case. Ordered quinine in solution, grs. xv to the ounce of water. S. One teaspoonful every hour.

Jan. 17, 1877. Whooping and vomiting every two or three hours. Increased the strength of the quinine solution to ℈j to the ℥j of water.

Jan. 19. Whooping violently. Paroxysms occurring regularly every three hours. Vomiting often. Face turns black. Ordered three minims of nitrite of amyl to anticipate by about five minutes, if possible, the expected paroxysms. I administered the amyl myself the first time, as the opportunity presented itself during my visit. It seemed to diminish the force of the cough and no vomiting occurred.

Jan. 20. Parents have been faithful in the use of the amyl, but make no report of importance save that there is no longer any vomiting nor blackness of face, and the patient seems less exhausted after coughing.

Jan. 21. Parents report the sound of the whoop gone and interval between paroxysms lengthened by an hour or two. Lottie and Thomas, sister and brother of the patient, are coughing, but have not yet developed the whoop. Ordered continuance of the amyl, and to give the quinine solution to the sister and brother.

Jan. 22. Patient is free from any cough that is specially characteristic of pertussis. Has good appetite; sleeps through the night, seldom waking. Ordered the quinine to be continued and to suspend the use of the amyl.

Jan. 23. Patient needs no further attention, as she is quite free from any distress, or even of inconvenient symptoms.

The patient's sister has a decided whoop, coughs convulsively, and vomits during the paroxysms.

CASE. IV.—Lottie L., 10 years old; sister of the patient alluded to in Case No. III. *January* 23d, 1877. Whoops to-day for the first time. Has been coughing about a week. Has been taking quinine for about two days. Ordered to continue the quinine.

Jan. 25. Paroxysms pretty violent; vomiting and changing color. Ordered amyl nitrite, two minims, whenever the paroxysms can be anticipated by a few minutes, or even during the early moments of the cough.

Jan. 26. Interval between the paroxysms very much lengthened; whoop decidedly toned down. Coughs once in four or five hours.

Jan. 28. Patient doing well; whoop almost gone; no vomiting. Ordered to continue the amyl.

Patient's brother, Thomas, developed a whoop on yesterday, but has no vomiting.

Jan. 30. Allowed the amyl to be discontinued, as the patient has no symptom more distressing than an ordinary cough.

CASE V.—Thomas L., 6 years old; brother of Emma and Lottie L., mentioned in Cases Nos. III and IV. *January* 28th. It was reported to me that this patient began to whoop yesterday, 27th instant. Has been taking quinine about seven days. There is no excessive violence of the paroxysm and no vomiting. Ordered same treatment to be continued without change, excepting to give a half teaspoonful of the elixir acidi hydrobromici every three hours to relieve the symptoms of quininism complained of.

Jan. 30. Found patient about the same as at the time of my previous visit, but relieved of the distressing head symptons due to the quinine. Ordered nitrite of amyl, two minims, as in the case of Lottie L., and awaited results.

February 1. Patient whooping at rare intervals, and as it is now difficult to time the use of the amyl accurately in advance of an expected paroxysm, it is given with caution in the first stage of the cough.

Feb. 3. Patient doing exceedingly well. Does not take an inhalation of amyl oftener than twice in the twenty-four hours.

Feb. 5. Ordered the amyl to be stopped, as it can only be given at random with reference to any serious paroxysm. Some of the fits of coughing that are very threatening at their commencement seem to expire ignominiously in the first stage even when the amyl is not given.

Feb. 6. Was sent for in haste to see the child in a convulsion. Spasms of a clonic variety succeeded each other for several hours. They were at last controlled.

I could not account for the spasms, but possibly they are to be attributed to the prolonged and rather free use of quinine in a child of only six years of age. Certain it is that the quinine, which I thought to be essential or extremely useful, would have been laid aside because of creating too much distress in the cerebral nerve-centre, had it not been for the confidence I felt in the efficient antidotal action of the hydrobromic acid. The spasms did not return, and the cough needed no further attention.

Case VI.—Maria Louisa M. Seven years of age. Much emaciated and weakened in consequence of a recent attack of erysipelas which had spread from the genitalia to all parts of the body below the axillæ. *February* 9. Has had a cough of a paroxysmal character about fourteen or sixteen days. A well developed whoop has been noticed for about four or five days. Vomiting invariably occurs, with every round of spasmodic coughing. Ordered the usual hourly doses of quinine of the strength of grs. xv to the ℥j of water.

Feb. 13. No change, excepting the abatement of the vomiting. There is the usual amount of expectoration, but no ejection of the contents of the stomach. There are about fifteen paroxysms during the day, and they occur as frequently as every half hour during the night. The patient, owing to previous sickness, had become so tolerant of quinine that I felt it proper to increase the strength of the solution from grs. xv to grs. xx to the ℥j of water.

Feb. 15. Intervals are longer between the paroxysms but the cough is so hard and prolonged that the patient is greatly weakened and distressed. Patient suffers great dread of the usual spells of coughing. Ordered chloral hydrate, grs. iv in sweetened water, every three hours, and that the quinine be continued, omitting only the doses due in the hours devoted to the chloral.

Feb. 17. A little change for the better in all the symptoms. Ordered to continue treatment without alteration.

Feb. 19. Paroxysms somewhat moderated in intensity, but still very exhausting. There are about eight paroxysms during the day and about three or four during the night. The chloral seems to have done considerable service, but every item of improvement is so slowly achieved that more rapid relief would be desirable. Ordered two minim doses of nitrite of amyl by inhalation whenever the sensations indicated the imminence of a storm of spasmodic coughing.

Feb. 20. Patient has used the amyl four times since last visit, each time with long intervals of rest.

Feb. 21. Patient has used the amyl twice since last visit and says that she thinks she will not need it any more. Recommended its temporary suspension.

Feb. 22. Patient has suffered an increase in the force and duration of the cough and a lessening of the length of the rest interval. Ordered the quinine to be continued, as usual, but to wait a while before resuming the amyl.

Feb. 23. Patient seems to be in no respect better than on yesterday. Ordered the resumption of the amyl.

Feb. 24. Patient much better.

Feb. 25. Patient still better.

Feb. 28. Patient doing well with only one or two paroxyms of cough during the twenty-four hours, and "romping" does not seem now to induce a cough. Advised the amyl to be discontinued.

March 5. Patient's parents had assumed the responsibility of resorting to the amyl two days ago for about twenty-four hours, giving it three times.

March 9. Quinine is no longer deemed necessary. The patient is practically free of pertussis. She soon became hale and hearty and better in health than ever before.

CASE VII.—Annie A. Aged three years and six months; very much debilitated by the effects of a recent attack of diphtheria. There had been cases of whooping-cough in the house where the patient resided. *February* 10, 1877. The cough was nearly incessant, and was spasmodically violent as often as every half hour, day and night. Her strength was not equal to such a strain, as she had been coughing for nearly a week with very little restful intermission. Ordered quinine in solution, grs. v to the ℥j of water, every hour, a teaspoonful.

Feb. 12. Frequency of cough seems to be diminishing.

Feb. 14. Coughing reduced to the paroxysmal periods only, but no less violent than when the quinine was first administered.

Feb. 16. Report the same as at last visit. Ordered the amyl nitrite in two minim doses about every three hours—an effort to be made to anticipate, with sufficient promptness, a violent paroxysmal cough.

Feb. 17. Received report that the paroxysms were abated in force, duration and frequency. Treatment continued.

Feb. 19. A still better report of general improvement.

Feb. 21. Amyl has been used only once in the past twenty-four hours, and only three times in the past thirty-six hours. Ordered the use of amyl to be discontinued.

Feb. 23. Amyl has been used twice since my last visit.

Feb. 25. No amyl has been used since last report, as cough is entirely relieved. Patient was sent to the country to her relatives to recuperate.

CASE VIII.—Robert A. Four years and four months old. Brother to patient described in case VII. He also had some traces of diphtheria, but was not much weakened thereby. *February* 28. Exposed like his sister to the influence of whooping-cough, within their own dwelling, he began to cough about the time of my first visit to his sister, but it was not until two days ago that he became subject to violent spasmodic paroxysms of cough that exhausted his strength. I had not ordered quinine during the preliminary cough (though quite certain that he was developing a whooping-cough) because he gave his parents so much trouble in administering medicine of any kind as shown during his previous illness. I resolved to try the amyl without the quinine. Ordered nitrite of amyl, two minim doses to anticipate the paroxysms, as nearly as may be, but not oftener than every two hours.

March 1. No abatement of the cough, excepting at night. He will now sleep the night nearly through without a serious "*spell of coughing.*"

March 3. Same report as at last visit.

March 5. Same report. Thought the general tone of system betokened the need of the supporting effects of quinine; therefore ordered quiniæ sulph. in solution, grs. viij to the ounce of water, (a teaspoonful every hour), and to continue the amyl.

March 7. Every symptom markedly improved.

March 9. Further improvement, and treatment to remain the same.

March 11. Amyl given three times every twenty-four hours since last visit. Every symptom altered for the better.

March 14. Amyl given only four times since last visit.

March 17. Amyl given only once since last visit. Parents thought that the whoop was returning, but this was probably an error of judgment. Ordered amyl to be stopped and the quinine to be continued. Doses to be given at intervals of every three or four hours.

March 20. Saw no reason for continuing treatment; therefore advised the parents to allow the patient to join the sister in the country. About the middle of April they returned to the city looking rugged and well.

CASE IX.—Allen N. N. Nine months old. Nursing from the breast. *March* 3. This little creature was in good health and well nourished, but was teething at the time he developed whooping-cough. The exposure to the disease could readily be

traced to where the mother and child had made a visit. Coughing had been violent and paroxysmal for about a week. A classical whoop had signalized the cough for two or three days. Rest at night seemed to be altogether broken up. Ordered quinine in solution, grs. v to ℥j of water. Dose, one half teaspoonful every hour.

March 4. Stomach very much disturbed. The bitter of the quinine has created a gastric sensibility that it seems necessary to allay. Ordered the quinine to be stopped for a few hours.

March 5. A physician residing near the patient was called in, in haste, to relieve a sudden clonic spasm. Dental irritation added to the exhaustion, produced by the severe coughing, also loss of rest, vomiting and the constant nausea excited by the bitter solution, had been enough to give rise to this form of nervous action. Scarifying the gums and other appropriate treatment relieved the convulsions. I ordered a combination of milk, lime-water and "*cordial d' anisette*" (a commercial elixir of the pimpinella anisum) to be fed to the infant, by the teaspoonful, every few minutes, excepting when disposed to sleep. The effect was everything that could be desired, and was continued for three days.

March 8. Found the patient in much the same condition as previous to March 3d. Last night the rest was much disturbed by severe fits of coughing. Ordered the nitrite of amyl to be given by inhalation, in one drop doses in anticipation of violent paroxysms as often as three times in the twenty-four hours.

March 9. Found the patient tolerated, the amyl very well, and a noticeable abatement in the force and frequency of the paroxysms of cough had been the result. Ordered this treatment to be continued.

March 10. Every morbid symptom apparently losing identity. Ordered the amyl to be continued.

March 11. Every good expectation realized.

March 13. Ordered the amyl to be suspended for twenty-four hours.

March 14. Paroxysmal coughing, though quite atonic in its character, has been observed to gain a little in force, and the night's rest has not been so good as for two or three preceding nights. Advised waiting another day for further observation.

March 15. Precisely the same report, and it was evident that the symptoms were regaining force. Ordered the amyl to be resumed.

March 16. Symptoms seem to be under wholesome restraint.

March 18. No whoop in the cough, and cough much lighter.

March 20. Ordered the amyl to be stopped, as the cough has no characteristics that demand anything more than certain demulcent expectorants of the most ordinary kind. I kept the patient under observation for several days, but had no occasion to suggest any form of treatment after March 20th. The case, as one of whooping cough, had practically terminated after March 15th, or twelve days after I first saw it, and seven days after the use of the nitrite of amyl had been begun. Nursing from the breast had been interrupted for three days, viz: from the 5th to the 7th inclusive, but had been resumed without much inconvenience to the mother, and no rebellion on the part of the infant.

CASE X.—Amanda T., 1 year old, nursing from the breast. *March* 13. This infant had cough for two or three weeks, until on her birthday (10th inst.) she developed a whoop. Every paroxysmal return of the cough was now well marked by the peculiar sonorous inspiration, and as many as eight or ten attacks occurred on the nights of the 12th and 13th. I resolved not to give quinine, lest I should thereby interrupt the desire to nurse, and consequently the use of the mother's breasts. The mother was anxious to preserve that function for special reasons, which received my sympathy and approval. I ordered the nitrite of amyl in one minim quantities by inhalation, to anticipate at first *every alternate* paroxysm.

March 14. Had no reason to relinquish the remedy, nor to alter the directions.

March 15. Patient improved. Evening and morning cough much the same, but nights less disturbed. Ordered the amyl to be given as far as possible, in anticipation of every paroxysm.

March 16. Parents report that the child seldom whoops and has fewer fits of hard coughing. They gave the amyl eight times since my last visit, but only twice in the night.

March 18. No whoop is now noticed and the coughing, though by spasmodic returns, is very much lighter and less frequent. Ordered the amyl to be stopped for a while to see how we ought to proceed.

March 20. Parents were decidedly of the opinion that the amyl ought to be resumed, as they thought the graver cough symptoms were returning. I ordered the amyl to be given in advance of every alternate paroxysm, as nearly as it would be possible to observe that plan.

March 22. The parents had suspended the use of the amyl of their own accord since my last visit, after three inhalations had been given. The patient had now no cough that demanded extraordinary means to allay, and I considered the case as one

that the parents were themselves competent to manage for the future. At a subsequent visit of inquiry, I learned that nothing had occurred after my last visit calling for any further medical attention, either professional or domestic.

These few cases show that the nitrite of amyl is potential to a degree important in practice in allaying the characteristic and most distressing symptoms of whooping cough; that no antagonism exists between it and at least one approved and valuable remedy, viz: quinine; that it is not necessary to suspend the use of amyl at any time in consequence of danger arising from the too powerful action of any of its physiological properties. Here permit me to quote briefly Dr. S. Weir Mitchell, who says: "I find physicians very timid as to this remedy; but, after much and long use of it, I have altogether lost the dread of it with which I began."—*Med. Times*, March 6th, 1875.

Dr. Hutchins, of Brooklyn, remarks that "there appears to be very little danger from the use of amyl under any ordinary circumstances. In the case of anæmic persons, by whom a larger quantity is required, it should be administered with caution. Beyond this particular it is comparatively harmless. Those who have used it freely have learned to dismiss their fears, but not of necessity, their sound discretion, the exercise of which invariably secures safety." In my cases, the required therapeutic action seemed to monopolize all that the drug was capable of affording, and the dreaded physiological action was, consequently, neither conspicuous, threatening, nor at any time dangerous.

What it is fair to assume regarding the therapeutic action of the amyl in this affection must depend upon our familiarity with, and confidence in the experiments that have been made with this drug by many reliable practitioners within the past ten years in maladies of a kindred nature.

Drs. Brunton, Leishman, Anstie, Thompson, H. C. Wood, Jr., Connor, Madden, and Osgood, unite their testimony in approval of its use in angina pectoris. Drs. Jones, Connor, Duncan, Flagg, Kitchen, Pick, Leiser, Jastrowitz, and Osgood, declare it proved effectual in cases of spasmodic asthma.

Drs. Janaway and Minich report that *certain grave conditions arising from structural disorder of the heart* and failure of the heart's action were relieved by nitrite of amyl.

Drs. S. W. Mitchell, Browne, Jastrowitz, McBride, H. C. Wood, Jr., and M. Bourneville, give unequivocal testimony of its value in epilepsy. Drs. Foster, Funkel, and Forbes, report remarkable success in the treatment of *tetanus* with the nitrite of amyl.

I have seen satisfactory notes of the employment of this drug in cephalalgia, hemicrania, facial neuralgia, the cough from congestion of the fauces and the whole respiratory track belonging to acute bronchitis, trismus nascentium, hysterical convulsions, cardialgia, gastralgia, colic, cholera, dysmenorrhœa, puerperal convulsions, lead colic, hiccough that resisted all other treatment, blepharospasmus, various forms of spasm, cold stage of intermittents, sea-sickness, chloroform narcosis, &c., &c.

Each and all of the diseases mentioned in the foregoing list have been submitted to the nitrite of amyl treatment by accomplished and trustworthy practitioners who have lucidly recorded and frankly published their experience; and in all these cases (indeed many of each) the action has been most favorable and worthy of repetition.

The former President of the Medical Society of the County of Kings, in his report upon amyl nitrite, published in 1876, presents his views in the following language:

"According to my experience the nitrite of amyl is a relaxer of spasm in all involuntary muscular fibre; it possesses the power of lowering the arterial tension; it increases the expansive movement by relaxing the muscular walls of the arteries; it causes dilatation of the brain vessels, and relieves hyperæmia of the spinal cord; it increases and maintains the temperature of the body.

"It is primarily a remedy for spasmodic action, where there is probable spasmodic contraction of the capillaries; it acts promptly; *it is manageable*, for the flushing of the face is usually coincident with relief of the symptoms for which it is exhibited, and suggests the withdrawal of the drug; it does not act unexpectedly—*i. e.*, out of proportion to its dose; it leaves no unpleasant sequelæ. *Its curative power depends mainly, if not exclusively, on its interruption of a pathological habit.*"

This last assertion seems to apply with peculiar force to pertussis, for if there ever was a train of symptoms markedly prone to lapse into conditions governed solely by habit, that train of symptoms would be those belonging to whooping cough. This

tendency is only prevented by cutting short the disease in its earlier stages.

Dr. Mader's views, recently expressed in a German publication, are worthy of consideration as suggestive of that to which amyl owes its remedial action in disorders of this nature. He says: "It is quite open to question whether the nitrite of amyl in dilating the vessels is really that to which it owes its therapeutic effect, and is not rather a disagreeable accompaniment, while its useful effects are due to the production of a transitory narcosis analagous to that produced by alcohol, ether or chloroform."

Those who are acquainted with the contributions in pathological anatomy, recently presented to the Academy of Medicine of Paris, by M. G. de Mussey, and are inclined towards his views, so long maintained, that whooping-cough is an internal eruptive fever, which he thinks his investigations and specimens fully demonstrate, will possess, not only a rational theory concerning the etiology of the cough of pertussis, but also something very practical upon which to base a confident expectation regarding the beneficial effects of the use of amyl.

ART II.—*Some Points in the Practice of Medicine among the North American Indians, with Incidental Reference to the Antiquity of the Office of the Physician.** By JOSEPH M. TONER, M. D., Ex-President of the Rocky Mountain Medical Association; the American Medical Association; the American Public Health Association, etc.

As it is quite impossible to follow out in detail the habits and usages peculiar to the different tribes of North American Indians, I will confine my remaining remarks to some points in the

* This is an extract from the Address of Dr. Toner, as President of the Rocky Mountain Medical Association. delivered at the session held in Chicago, Ill., June 6th, 1877, and ordered to be published. Extracts from the address were given in the Chicago press of June 7. The whole paper is marked by ability, and shows much careful research, and, did our space permit, we would gladly present it in full to our readers. The address, with its valuable foot-notes and the biographies of the members of the Society, will, we understand, soon be issued in book form. The Rocky Mountain Medical Association is "alone social and memorial in its purpose, and owes its existence to the friendship formed among the physicians residing East of the Rocky Mountains who, in 1871, attended the meeting of the American Medical Association in the City of San Francisco."—EDITOR.

practice of medicine among them. I wish, however, to premise that my investigation of the subject is by no means exhaustive. But contrary to expectations, the study given to it from an historical point of view has led me to the conviction that the appearance of the physician and surgeon among these primitive savages and barbarous races antedates the priest and the law-giver. The physician among all tribes is a person of dignity and of the highest consideration, and is present at their important councils, and after death is buried with imposing ceremonies. He usually dresses with elaborate care, occasionally in the most grotesque manner, and always has with him his medicine bag, the precursor of the saddle bag, and the city physician's satchel.

I am aware thus to assign a greater antiquity to the office and functions of the physician than the priest, is in contravention of the view which has generally been held upon this subject; yet, I think a little reflection will show that it is the correct one. To the profession it is well known that the services of the physician and surgeon are often in infancy a matter of the first necessity for the preservation of life, even among the lowest in the scale of intelligence, as well as for the relief of accidents or suffering to which the savage, equally with the civilized, are liable. It is more than an hypothesis, nay, it is almost a certainty, that savagery was the state of primitive man.

From what is known of the condition and habits of primitive and savage races, and from general reasoning, the following may be assumed as the probable original stages and line of advancement in medicine and medical practice among them: Instinct is the first teacher. There are, even at this day, races of human beings with such a low grade of intellect or power of reasoning as scarcely to raise them above animals, which have only instinct to guide them. But both instinct and intelligence suggest repose in a recumbent position in sickness as well as for diseased and injured parts. To secure rest and administer to the few natural wants of a disabled or suffering fellow-being, would make but a slight demand upon human intelligence and sympathy. Yet among such people, whose existence is one of enduring toil in looking for food and waiting to take the life of animals at advantage without implements—to such, rest alone, even for a day, is both medicine and cure, allowing fatigued members repose, and repair to overtake waste.

One of the earliest remedies or methods of treatment and cure among all the lower savage races is that of sucking with the mouth, licking with the tongue, and breathing or blowing upon the diseased or painful part. Instinct leads children and many animals practically to adopt a similar procedure. There are many instances where animals eat herbs, clay, &c., when sick which they do not when well, and it is reasonable to presume that they do so for a remedial effect. Making due allowance for the suggestions of a depraved appetite, and the craving for some really suitable article of food or drink that might benefit individual cases, originating with the patient, we must, in addition, admire the genius that could, untaught, observe the course of disease, and which led primitive physicians to select and apply external remedies with judgment, for the cure of disease. It shows their advancement in medical knowledge, as well as an ability to observe and reason from cause and effect. Following close upon this knowledge of medical practice, speculations as to the cause of disease began to be formed which influenced popular feeling, and largely controlled or modified the practice of the physician. The earliest hypothesis of internal and obscure diseases contained the idea that evil spirits and personal enemies caused maladies by conjurations through secret and occult practices. This belief and philosophy gradually developed among the people an element of fear of the unseen power of the universe, and introduced a new class of remedies, and, indeed, a new order of physicians, who set themselves up as learned in mysteries and capable of holding communion with spirits of earth and air. The remedies of this class of physicians were always associated with ceremonies and Fetish practices, generally denominated Shemanism, such as the use of charms, amulets, spells and incantations. It is in this, the second stage of mental development and progress of human society, that the earliest awakening sense of reward, or punishment after death, is noticed, and some practices which can be associated with ideas growing out of moral responsibilities to an overruling providence. It is in this stage of mental development that the priestly functions are first observed. As a class, the priests are extremely self-reliant, and aspire to exercise the authority of prophet and law-giver, and to rule supreme. The priests, too,

assume many of the functions of the physician, and at times wholly absorb their office, as they have a tendency to do all the functions of government. The dual quality of priest and physician has prevailed in all ages and forms of civilization, and has even continued down to our own time. However, there seems to have been at all times and among all races physicians who made no pretension to priestly prerogatives and mysterious practices, but who relied upon the use of rational remedies for the cure of disease. Medical science had made much progress among races whose physicians were able to determine something of the cause of disease, and the organs of the body involved, and to select and administer remedies internally which were capable of effecting cures. This stage I shall denote the third stage of medicine, and which antedates written records. It is evident to every reflecting person that the exhibition of a proper internal remedy requires a much more complicated process of reasoning and a more accurate knowledge of the functions of the various organs of the body and the effects of medicine, than is possessed by any primitive savage race. Time will not permit me to dwell farther upon this subject, but I trust that I have presented facts enough to render it apparent that the physician must have held a most important place in the social scale ever since the genesis of man upon earth.

The priest deals with the ethics of man's highest nature through the faculties of the mind—*will, memory and understanding*. These, and particularly the latter, are but feebly developed, and but little exercised by people in a state of savagery. The instances recorded in history are numerous where the Indian physician, his remedies and modes of practice are mentioned, but no allusion is made to the priest. And quite often the declaration is distinctly made that particular tribes had no religious observances or priests, and no belief in God or even a word in their language that would express the idea of a Creator and Supreme Ruler of the Universe. But sufficient for the present purpose will be the testimony of Rev. Father Baegert, a Jesuit Missionary who lived among the lower California Indians for seventeen years, dating from 1751. I quote from a translation of his work, as published in the Smithsonian Report for 1864, (p. 390). In speaking of the California Indians, he said "they had

no magistrates, no police and no laws; idols, temples and religious worship or ceremonies were unknown to them, and they neither believed in the one and only God, nor adored false deities."

The Indian is patient in suffering, courageous in visible danger, but is apprehensive of the unknown and occult powers of nature, which are believed to be numerous and so much the more a mystery to him than to civilized man as to transform the hero into a coward. It is unquestionably true, that the uncivilized, as well as the semi-civilized Indians, have many unmeaning practices and superstitions, chiefly because they know nothing of remote or secondary causes. They, like all unlettered races, are fond of ceremonies and spectacular exhibitions, and the person among them who becomes most expert in these, and acquires the most comprehensive knowledge of natural laws, is at once elevated to the rank of a "Medicine Man," or physician. Poorly qualified as they are, they have among them pretenders to medical knowledge, mere jugglers, whose practice by incantations and the exhibition of charms and by other Fetish measures, appeal almost exclusively to ignorance and credulity. But, while this is true, we may, with justice, ask what profession, science or art in any age, country or state of civilization has ever been free from impostors? And, while we are bound to condemn these follies and turn men from such practices and deception, still we must, I think, recognize the fact that culture, civilization and religion are each the result of forced training; in other words, not conditions, natural to man. The sum of actual knowledge is, therefore, never a constant quality in a nation. People or nations who maintain culture at a high standard of excellence must be on a constant strain. To pause in the support of any branch will be to retrograde. And it is quite as important to recognize the fact that errors and false principles are also the result of education, and dominate judgment just as strongly as does truth. There are more martyrs to false theories than to true principles. What is Truth? This seems as difficult to answer now as when the Roman governor of Judea propounded this momentous question. Toleration, or, rather, mental liberty and emancipation from dogmatism, is a virtue born of the Saviour, but has neither apostles nor disciples. It has no saints, no shrines and no worshipers.

That the Indian is controlled in his conduct through life by a different philosophy from that of the educated Christian, is very evident. It is particularly noticeable in their treatment of the sick, but less so in their surgical practice. Their internal remedies are mostly administered or accompanied by some incantations and ceremonial jugglery. However, from the testimony of reliable persons, who have lived for years among them, as well as from written history, they have always had practitioners whom experience has taught how to select medicines, and administer them with more or less judgment.

With some tribes, the physician is understood to contract to *cure*—not merely to treat his patient according to the best of his abilities. This is to be inferred from the fact, that some of them held the physician responsible for the recovery of those entrusted to his care; and when death instead of recovery took place, the disappointed friends have, and occasionally exercised the right, of taking the life of the doctor. This cruel treatment is, no doubt, based in part upon the prevalent belief that the physician has the power to inflict disease as well as to cure it. But we know enough of human nature to see that this is but an exaggeration of a natural feeling of disappointment and a propensity to resentment which culture and civilization suppress.

Henry, in his *Travels in Canada*, gives an account of a physician he saw put to death by the infuriated friends of the deceased patient. Many other authors corroborate the existence of this custom.

General Alvord, of the United States Army, observed the same conduct among the Indians of Oregon. Father Charlevoix (p. 188), says: "The Indian sorcerer is safe nowhere, and is condemned to the punishment of prisoners of war. Those who are least culpable are knocked on the head before they are burnt." It is, therefore, plain that the custom of executing witches was not a feature confined to Old or New England. The physicians are usually paid the fee, or receive a present as soon as they enter the cabin, and some thus stipulated for the compensation in advance. But with other tribes the compensation is not made until the cure is effected. The Indian physician receives almost any article proffered—arms, skins, robes, moccasins, ornaments, food, a dog or horse.

To appreciate the Indian physician at his real worth, he must be judged from a standard of proficiency that will take into account the means at his command, as well as the degree of intelligence possessed by the tribe to which he belongs, and not be measured by the exactions which civilization and Christianity have created for the nineteenth century. It is my desire to discuss Indian medicine as it existed when this continent was discovered, or at least before their system was modified by contact with the whites. It is, therefore, proper in comparing it with the best practice of to-day, that we should remember the progress the science of medicine has everywhere made within this period. I will not take up your time with an account of their ignorance of the science of medicine or their absurd and foolish methods of cure. I seek rather to present their practice fairly, if not at its best. It presents, when viewed in this light, no mean degree of success; yet, it is nevertheless true that their strange and ridiculous manœuvres and jugglery offend the common sense of to-day, and were, no doubt, often carried to an extent that lost sight of the essential points in the treatment of the sick.

The theory of disease held by the Indian was so entirely dif ferent from that of the educated physician of the present age, that it is proper his practice should be viewed in connection with it. They believed that disease was the result of evil spirits, and that the medicine men had power to hold close communion with the unseen, and thus discover the secret cause of all disorders, and which, by incantation, they could expel. Notwithstanding this absurd notion, they were not entirely ignorant of the functions of some of the more important organs of the body. This they learned by the similarity of the organs in man to those of the animals they were accustomed to kill and cut up for food. They were cognizant of the fact that the lungs are the organs of respiration, that the heart is necessary for the circulation of the blood, and that a suppression of the action of the kidneys would be fatal to life.

Naturally, the more urgent demand for the skill of the physician would be to relieve conditions growing out of accidents, more or less severe, such as luxations and incised and punctured wounds. In the treatment of these, the "Red Man's" physician occasionally displayed much common sense mingled to some extent

with mystery. Every warrior is expected to have some knowledge of the healing art and the properties of plants and roots, that he may intelligently treat such diseases and accidents as may occur when off at war, or on a hunting expedition. Their necessities taught them efficient modes of transporting those who became disabled on the march. Dr. Pitcher describes a litter they constructed of two poles lashed to cross pieces by means of bark, which formed a web or mat, upon which the wounded are placed and carried by four persons. A method somewhat similar for carrying the disabled is mentioned by Father Jacob Baegert as resorted to by the Indians of Southern California. They placed, he says, "their sick or wounded upon a rude litter made of crooked pieces of wood, which would constitute a rack to any but Indian bones;" but adds, "the carriers were in the habit of running with their charge." An incident is recorded by Alexander Henry as evidence of the hunter's ability to arrest a hæmorrhage which if left to itself would soon have caused death: An Indian was on his wintering ground trapping beaver, and when at a distance from his lodge, slipped on the ice, and falling with his arm on his hatchet, nearly severed the hand at the wrist. Taking off his shirt, he tore it into strips, bound them tightly around the arm above the wrist, and thus stopped the bleeding, and then walked three miles to his cabin. The hand was then detached from the arm, thus completing the amputation; the stump was dressed and healed rapidly.

When necessary to cleanse deep wounds, the Indian physician made use of expedients, some of which are worthy of mention. For instance, they constructed a syringe made of a bladder, with a quill inserted in it for a nozzle, through which they forced water or a cleansing decoction. This same device was used by them for administering clysters. Suction, both by the mouth and through tubes, was resorted to for the cleansing of deep wounds, as they wished to avoid enlarging them, and looked upon a practice that did so with disfavor. Tubes made of stone and other substances seem to have been much used, and are frequently found in many Indian graves. These tubes also served as a sort of cupping instruments and for blowing to cool inflamed parts, and for conveying water, forced from the mouth, in washing out cavities and wounds not readily reached. Their surgeons took special

care to remove all foreign bodies from wounds as soon after an accident as possible, which they accomplished with care and dexterity.

Numerous instances have been recorded of their applying dressings of cold water, and also poultices of a variety of substances. Dr. Pitcher states that they coaptated, and held in position, incised and other wounds by means of sutures made of the tendons from the leg of a deer. These they introduce with a needle made of bone. A slender fibre from the centre of the tamarack, and also the inner bark of the bass wood, was used as threads for sewing up wounds. The rule was not to remove the sutures until after the sixth day; and while they were averse to enlarging a wound, nevertheless they were aware of the advantage of having them heal from the bottom. To insure this, they inserted tents of slippery elm bark in deep wounds to keep them open. From the manner in which the Indians of North Carolina, according to Dr. Brickell, treated the prisoners taken in war, and whom they desired to keep as slaves, it is evident that they knew that in amputation it was important to preserve a flap of skin to cover the end of the bone. The method they adopted for preventing slaves from running away was to maim them, by cutting off one-half of each foot. "They flayed the skin from the setting-in of the toes to the middle of the foot, cut off one-half of his feet, wrapping the skin over the wounds and then healing them." He farther states they have the skill to arrest hæmorrhage. John Lawson, in his *History of North Carolina*, promulgates the same fact (p. 322). Alexander Henry, before referred to, records a case of a man wounded by an axe, penetrating into the lung, which was followed by profuse hæmorrhage and the escape of air from the lung through the opening; the case was so successfully treated, that the Indian was alive twenty years afterwards.

Loskiel says, a hunter accidentally dislocated his thigh when alone in the woods, but replaced it by fastening one end of a strap to the nearest tree, and the other to his dislocated limb, and then forced himself away from the tree by the uninjured leg in such a manner as to make traction and replace the dislocated joint. The Indian physicians were aware of the advantage gained by muscular relaxation in reducing dislocations. Fractures, according

to Dr. Zina Pitcher, Father Charlevoix and Loskiel, were treated by placing the injured limb in splints made of birch bark carefully fitted to the part and fastened by bark bandages so as to keep the bones in their position. I find no mention of any means used by them for extension and counter-extension in fractures. Of course shortening of limbs must have occurred in certain cases from such neglect. The testimony is general that but few crippled or deformed Indians were to be seen. Bancroft states that the Haidah Indians of the Pacific Coast, to arrest hæmorrhage from bites or wounds, used eagle-down to thrust into the wound or bind upon it. Pitcher states the ordinary puff-ball was used for arresting hæmorrhage; and in epistaxis, plugging the nostrils with pulverized charcoal was resorted to. Smith, in his *History of Virginia*, speaks of the inveterate character of ulcers; and Zina Pitcher remarks that those of an indolent character are sometimes treated with a salve made of fresh ashes and tallow, or calamus and the actual cautery. The Indians treated boils and phlegmonous ulcerations by scarification and lancing, and by poultices of Indian meal, slippery elm bark, wild onions, &c. The Indians of Cape Flattery (see *Smithsonian Report* for 1870, p. 79), made poultices of oysters and fresh fish. They also made use of the actual cautery and a moxa made into a cone from the dried inner bark of the white pine. The part of the body selected for the moxa is prepared by moistening; the cone is then placed in position and ignited, which, burning, leaves a deep sore. This is kept open by removing the scab until relief is obtained. It is a favorite practice among the Indians of Cape Flattery to use external cautery for all internal diseases on the theory that it serves the double purpose of blistering and bleeding.

Charlevoix remarks that they possessed several cauterants, prominent among them was rotten wood, possibly punk or touch-wood. Pitcher says that for hernia, they used bandages with pads, but when strangulation took place they were unable to afford relief. By historians, the toothache is stated to have been comparatively common among the Indians. Loskiel said that they used in this affection an application to the cheek of the bark of the white walnut, and when relief was not obtained by such remedies, Brickell tells us the tooth is punched out by placing a piece of cane against it, which is

then struck in such a manner as to drive the tooth out, without injuring the bone. The same author speaks of the success of the Indian physicians in their treatment of burns. Similar testimony is given by Loskiel, who says they made applications of a decoction of birch leaves in such cases. The latter, in referring to long confinements which produce bed-sores, states that they adopt the following method for the comfort and relief of the patient: They make a soft bed of straw, and under the part where the buttock rests, they leave an aperture to relieve pressure, and through which the natural evacuations may take place. Bleeding was a common and popular practice among all the tribes. Henry, in his *Travels*, states that it was held in such general favor that even those in good health resorted to it, and states that on one occasion he bled a dozen women as they were seated on a fallen tree—commencing with the first and opening a vein, and then the second, and so on—three or four bleeding at the same time. This operation is performed with a sharp flint, a vein being opened in the arm, and sometimes in the foot.

Joined to that of bleeding, cupping was a popular remedy, and was performed in the following manner: Over the seat of pain or part to be cupped, one would scarify and then place over this a gourd cut off near the end, half filled with combustible matter, which, being burned rapidly, exhausted the air from the gourd, forming a vacuum, and when placed on the part, made an efficient cup. Another mode of cupping, related by J. C. Beltramie, Dr. Pitcher and others, was as follows: After lacerating the skin with a sharpened bone or flint, the large end of a buffalo horn was then applied over the incision—exhaustion, in this case, being made with their mouth applied to the small end, which was perforated. The blood in this case is discharged through the mouth of the operator. Carver states that they sharpened flint-flake, by grinding or whetting on a stone, which he found to make an instrument quite efficient for cutting and for scarification. Brickell states that for scarifying, the North Carolina Indians also used the teeth of the rattle-snake, from which the poison had been extracted. Scarification was frequently resorted to, says Father Hennepin, for relief of pain and swelling even when cupping was not practised. According to Father Charlevoix, Henry and others, the gout, stone and apoplexy are unknown

among the Indians, and to this list Heckewelder adds rickets and scrofula, and Dr. Brickell says dropsy, diabetes, gout, stone, consumption, asthma, palsy, struma and a host of European diseases too numerous to mention, were completely unknown to the Indians of North Carolina. Hunter says the diseases most common are rheumatism, asthma, fevers, pleurisy and bowel complaints. Smith, in his *History of Virginia*, records the fact that dropsy was sometimes prevalent among the Indians of Virginia. Jones, in his Antiquities of the Southern Indians, p. 33, states that the treatment of diseases by Southern Indians did not depend so much upon medicines as it did upon strict regimen and abstinence. Father Charlevoix bears testimony that the doctor never refused the patient anything that he desired to eat, under the belief that his "desires in this state are the orders of the *genius* that presides over his preservation."

Loskiel says that the sick were given, as a diet, a thick soup of pounded corn meal. C. C. Jones says that the physicians occasionally required their patients to lie upon their stomachs with their heads over pans in which medicine herbs were being boiled, so that they might inhale their medicinal properties. The sweat bath was an institution in every village and camp, and used, not only in health, but for nearly every ill from which they suffered. Zina Pitcher gives an account of a mode of administering an earth-sweat bath, which was to open the ground when it was dry, or where wood had been burned; and before the ground had become cold. The opening was made deep enough for a man to lie down in, wrapped in a blanket. The patient was then covered with earth, excepting his head, and left for hours. Charlevoix and Pitcher mention the frequency of pleurisy among the Indians, which was treated by poultices and other external applications of which some were of a rubefacient character. They also bled in this disease. Consumption is mentioned by the same authors. Heckewelder claims that consumption had become more frequent among the Indians after the introduction of alcoholic liquors. Loskiel tells us that in consumption the meat of the rattle snake is made into a broth and administered with good results. DeForest, in his *History of the Indians of Connecticut*, mentions the existence of quinsy, which was treated by the sweat bath. As might be expected, rheumatism, both in the

acute and chronic forms, was a common disease among the Indians, old and young. It was treated, says Loskiel, by scarification, annointing with oils, rubefacients and poultices. A plant called jalap,and applications of the bark of the white walnut, were also used. Brickell, in his History of North Carolina (p. 398), says they have a kind of rheumatism which generally affects their legs with grievous pains and violent heats; while thus tortured they employ the young people continually to pour cold water upon the part aggrieved until such time as the pains are abated and they become perfectly easy, using no other method for this kind of disorder. Thus it will be seen that the American Indians early discovered the advantage of reducing high temperature by the application of cold water. Typhus fever was probably unknown to them, but the malarial and bilious fevers were common throughout the tidewater regions and Southern lowlands. These were treated by decoctions of herbs and cold lotions, but the names of the ingredients have not been preserved. Father Hennepin, in speaking of the fevers, says that for the cure of tertian or quartan ague and fevers, they used the decoction of a bark of a tree. Many of the tribes of Indians in the beginning of fevers used emetics, which consisted of different plants, as the spurge, thorough-wort, &c.; as purgatives they used the euphorbium and horse chestnut, &c. Much reliance in breaking a fever was placed on the hot and cold baths combined—a powerful reaction being produced by the transition of the body from a profuse sweat to a plunge or douche of cold water. The want of knowledge of the true nature of exanthematous diseases which they treated by the same methods, as they did many other complaints, no doubt occasioned many deaths. Dysentery and diarrhœa are mentioned by a number of authors as existing among the Northern and Western tribes. Father Charlevoix, Loskiel and Dr. Pitcher state that both dysentery and diarrhœa were treated by a decoction of the root of the low blackberry, and by the juice from the cedar tree, &c.

Paralysis is mentioned by Brickell, Charlevoix, Pitcher and Carver, but many allude to it as a rare disease. Father Charlevoix mentions the fact of an Indian suffering from epilepsy being cured by a bolus administered by an Indian woman, but has not informed us of what the bolus was composed. Lewis and

Clarke, in the journal of their expedition to the Pacific, mention the frequency of sore eyes among the Indian tribes of the plains. Brickell, in alluding to skin diseases, states that they are readily cured by plants collected by the Indians, and that scald-head was invariably cured by an oil made from acorns.

The testimony is almost universal that Indian women suffered but little in child-birth. The little aid rendered them was generally by females. Lawson, however, in his *History of North Carolina*, states "that no disadvantages were suffered for want of midwives; for these, as well as doctors well skilled in the practice, render labor less difficult." His language gives the impression that males, as well as females, rendered service when called upon in these cases. A singular proceeding calculated to bring on partial suffocation in the parturient woman, is related by Carver (p. 260). He describes a case where the surgeon, midwives and friends despaired of the life of the patient, but who was promptly relieved by a midwife who "took a handkerchief and bound it tightly over the nose and mouth of the woman; this immediately brought on a suffocation, and from the struggles that consequently ensued, she was in a few seconds delivered." The insensibility and relaxation produced by this treatment in some respects resembles a state of anæsthesia.

The subject of syphilis and its origin is one that, since the discovery of America, has caused much discussion in the medical profession. To assume, as many authors have done, that this disease was unknown until after the discovery of America, is ignoring history and prejudges the question. Abundant evidence is to be found, throughout the old chronicles and the early general and professional literature, of the existence of syphilis ages before Columbus was born. Indeed, the earliest writers upon this disease did not attribute its origin to America. That the soldiers and sailors who made early voyages to the New World lived dissolute lives, and perhaps died in European hospitals of syphilis, is very probable. But the evidence is entirely wanting that the disease existed either among the native Indians of North America or in Mexico until after it might have been introduced from the Old World. No mention was made of the disease until after the second voyage of Columbus.

You are aware of the character of discussions that have taken

place on this subject for nearly four centuries without reaching a conclusion. I shall not, therefore, attempt to recapitulate the arguments *pro* or *con*, but will present some facts recently brought to light, and allude to a few of the recorded observations of the earliest travelers in America on this subject. Dr. Joseph Jones, of New Orleans, has endeavored to ascertain from an examination of the bones of the prehistoric races found in the stone mounds of Tennessee, what were the probabilities of syphilis having existed among them. He states that John Lawson, the Historian of North Carolina, was the first American author to assert that syphilis existed among the Indians of North America prior to the discovery by Columbus. Dr. Brickell, who also resided in North Carolina, and was a cotemporary writer with Lawson, in alluding to the existence of venereal disease among the Indian tribes, considers it by no means a settled fact that the disease existed in America prior to the Europeans coming, but states that the Indians of his day were able to cure syphilis by the use of berries, which produced salivation as though mercury had been used.

C. C. Jones says that the Jaöuanos were successful in the treatment of venereal disease. Charlevoix, in speaking of this disease, states that the Indians used a powder of three simples that was an effectual cure of the most inveterate "French disease." Notwithstanding the seemingly conclusive evidence of Dr. Joseph Jones that syphilis existed among the races who erected the stone graves, he, in a review of the whole question from an historical point of view, thinks the evidence he has been enabled to present upon the subject favors the existence of the disease in America, but distrusts somewhat the great antiquity of the bones examined; and I therefore infer that his studies are not conclusive that syphilis existed among the mound builders, or, indeed, anterior to the discovery by Columbus. Loskiel, in speaking of this disease among the Indians, records the fact that when the Indians joined the French against the English in 1756, this disease was then first introduced among them; and for a time they were very unsuccessful in treating it. But, by observing the methods of the regular army surgeons, they gradually acquired knowledge so as to treat it with success. They alleged, said this author, that the disease was introduced by the white

man, and never had been known among the Indians before. R. H. Bancroft states that among the Malma people, the disease in some of its forms was not known to the Aboriginies of America. Captain Jonathan Carver says he was aware the theory was held in Europe that syphilis originated in America; but says, he could not find the least traces of it among the Nandowheses with whom he resided so long. He further states that he had satisfied himself this disease was unknown among the more Western nations, and thinks that it did not have its origin in America; but says the Indian nations who had relations with the Europeans, were afflicted with it. Pitcher, a competent medical authority, in speaking of this disease among the Indians, states they have no specific cure, but that the antagonistic properties of lobelia syphilitica makes it the remedy most relied upon by them, though secondary effects are frequently observed after its use.

Humboldt, in his *Political Essay on the History of New Spain*, gave careful attention to the question of the diseases that probably diminished population, and perhaps destroyed the Toltec race in Mexico; and more than suggests—almost proves, that it was identical with yellow fever. Numerous authors assert that, prior to the white man's successful settlement in America, the Indians had greatly diminished in number along the Atlantic coast, and in the Southern and Gulf States.

Want of time prevents my alluding to other diseases that have seriously afflicted the Indians. One word, however, on small-pox—a disease which, perhaps, has been the most destructive with which they have been afflicted. Undoubtedly this was brought by the early expeditions and explorers. The Indian treatment of the small-pox is particularly injudicious, their sweat and plunge baths being equally obnoxious and leading to fatal consequences.

I have run through much historical literature as well as works on travel and exploration of our country, and made many extracts and notes in the preparation of this address which I have not been able to use or even refer to. But enough has been presented, and I hope the Indian has not been lowered in your judgment by the imperfect recital I have given of his medical knowledge and practice.

In conclusion, gentlemen, though I have many apologies to offer

for the manner in which I have treated the subject presented, yet I hope I need make but few for the theme of my remarks. The physician, from the duties and requirements of his office, is prone to induction, to discover new facts, and to compare them with old theories, and thus to arrive at the best conclusion. And, naturally, he is attracted to the master works of the Creator of which man is the crowning part. Therefore, an investigation of man's early history and habits on this globe, and particularly the prehistoric races of our own continent, seemed not inappropriate for this occasion. Many deductions might be made from the few facts I have endeavored to present. I shall, however, make but one, which is connected with our profession. Everywhere, and in every age, among all tribes and people, whether the most savage or the highly civilized, we find the presence of the physician. He was ever deemed a necessity, and his services and influences have everywhere been commensurate with his high and honorable office, and won for him, in the Apostle's age, the appellation of the beloved.

615 *Louisiana Avenue.*

ART. III.—*Compressed Pills.* By WILLIAM A. GREEN, M. D., Macon, Ga.

It may be truthfully said, that the most serious obstacle to progress, especially in medical science, is that veneration for antiquity which is the common inheritance of every one. Lord Bacon wisely remarked, "Antiquity deserveth that reverence that men should make a stand therefor, and discover what is the best way; but when the discovery is well taken, then to make progression." Says McCosh: "Many piously-disposed minds are inclined to view the discoveries of science with suspicion. The progress of liberal inquiry and thought is shackled by this grave error." I admit that old and long received opinions should not be cut loose from in the eager quest after the unknown and marvellous, only after mature consideration and diligent investigation. In pharmacy and chemistry new discoveries are daily unfolding themselves because of multiplied facilities and the fresh impulse given to inventions in these latter days. The physician

should be ever on the alert to inform himself concerning new remedies for disease and the improved modes of their administration, and in this connection I desire to direct attention to the subject that heads this paper.

Compressed Powders (or pills) constitute one of the most desirable modes of administering medicines. We are indebted to Messrs. John Wyeth & Brother, manufacturing pharmacists and chemists, of Philadelphia, for this valuable and important advance in pharmacy. The Centennial "Committee on Awards," through their Committee on Pharmaceutical Preparations, makes the following complimentary allusion to their pills: "The compressed pills as manufactured by this firm (John Wyeth & Bro.) appear to be of the most uniform character in size, weight, and quality, and in all instances contain the amount represented. The important feature in the pills appears to be in their reduced size and the absence of any excipients. The five-grain pills of quinia sulphate are smaller than the three-grain pills as usually made in the shops, * * In our judgment these compressed pills are, for the above reasons—viz., smaller size, absence of excipients, and speedy solubility—superior to any other similar pills manufactured." For these reasons physicians will readily recognize their great advantage over all other modes for the administration of remedies.

We will all admit that the preparation of drugs in such a form as to be at once efficient and readily administered, is a matter of the utmost importance alike to physician and patient. In this respect great advances have been made of late years in pharmaceutical and chemical science, and the compressed pills stand at the head of all the improved medicaments hitherto introduced. In manufacturing these pills, all extraneous substances, as gum, mucilage, or other aids to cohesion, are excluded. No coating of sugar, starch, or gelatin, which only adds to the bulk of the pills and, by hardening, interferes with their ready solution and absorption, is used. Their flattened shape enables the patient to swallow them with greater ease than is possible with the spherical or oval form hitherto generally administered. So far as I have employed these pills in my practice, I am satisfied they contain only the purest drugs, and I therefore ask the profession to give the fullest trial. It costs but very little more to buy these

pills than the crude medicines, and the physician thus saves both the time and annoyance of making them in his office; besides, which is of greater importance, he gives his patients the benefit of a pleasant and agreeable dose, instead of the soft, irregular, and unsightly pills of his own make. For I have rarely seen a practising physician, unless he began his medical education in a drug-store, who could make a good pill mass, much less roll them in round and equal proportions.

Then, to sum up the advantages of these compressed pills, they are more easily swallowed than any other; are smaller because of the pressure employed in compressing them; no excipient is used; a dry powder is simply compressed by machinery into this convenient and flattened form. The compressed powders (so-called pills) are therefore porous, and for that reason are more soluble than ordinary pills made with an excipient. The porosity can be easily tested by placing a three-grain quinia bi-sulphate compressed pill in a glass of water; bubbles of air will escape and rise to the surface of the water, while disintegration takes place immediately, and the bi-sulphate of quinia, being quite soluble (much more so than the sulphate), dissolves in about ten minutes. All others of the compressed pills or powders are proportionately soluble—far more so than the ordinary pills in which the porosity is destroyed by the use of excipients. If this solution in cold water of these pills is so quick, what ought we to expect when taken in the stomach, where the temperature is that of animal heat?

I cannot refer separately to the long list of compressed pills manufactured by this house, which can be obtained from any first-class drug-store; but I cannot resist the temptation to mention one or two, the importance and value of which will readily attract the attention of every physician.

First, those of muriate of ammonia, the solvent and discutient, as well as antiphlogistic powers of which are so well known of late, and which have led to its extensive employment, especially in Germany, in all cases of sore throat, bronchitis, coughs, &c., particularly when they are attended with abundant secretion of thick and tough mucus or phlegm. The compressed pills of this agent offer a great advantage over the mixtures with liquorice, gum, and sugar, or other vehicles. By moistening the pill on

the tongue and letting it fall to the back part of the mouth, where it is slowly dissolved and comes in direct contact with the diseased surface, it exerts its peculiar local effect, as well as its constitutional effect as resolvent, alterative and tonic. It thus speedily mitigates cough or irritation, and lessens expectoration.

Chlorate of potash prepared in the same way is a remedy of acknowledged value in cases of sore throat, inflammation of the mouth, diphtheria, and milder forms of croup. Besides its depurative and detergent effects, it has a solvent action on the deposits characteristic of these troublesome diseases. In this form it is a pleasant and effective remedy—allowed to slowly dissolve in the mouth and trickle down the throat mixed with the saliva.

The peptone compressed pills are composed of one grain of pure pepsin and one of pancreatin, which is equivalent to ten grains of the ordinary or saccharated usually prescribed and dispensed; this is combined with lacto-phosphate of lime and lactic acid. It gives speedy relief in dyspepsia and indigestion when digestion is enfeebled by want of secretion of gastric juice.

ART. IV.—*Chloral Hydrate in the Treatment of Convulsions.* By JNO. M. THOMPSON, M. D., Silver Street, Newberry Co., S.C.

In the discovery of chloral, the profession have an agent of real merit and great value as a hypnotic, second only to opium, and of incalculable worth in the treatment of convulsions and spasm. I will give a few notes showing the beneficial effects of chloral as used in several different forms of this dreaded symptom, which is necessarily met with by the general practitioner.

J. H., æt. 50 years, merchant, an habitual opium-eater (morphine), frequently indulges in alcoholic drink to excess; awoke on the morning of May 15th, 1877, with a severe headache, which continued with increased severity during the day, and was aggravated by taking his accustomed amount of both morphia and alcohol, until one o'clock A. M. of the following day, when he was attacked with a severe convulsion, tossing himself about at a furious rate, finally throwing himself completely from the bed. The paroxysm lasted about twenty minutes, as I was informed on arriving just after he had been placed in bed and had gotten quiet. After an interval of half an hour, during which the patient lay in a perfect stupor, another attack of equal severity

followed. On examination, I found the pupil dilated; great rigidity of the muscles; pulse weak and slightly accelerated; very little frothing at the mouth. Upon inquiry, I found that his bowels were constipated, which was his habit, and which he generally relieved by enemata; but at this time he had taken a "dose of pills," which had not, up to this time, operated. I at once gave him ℈j each of chloral hydrate and bromide potas., which warded off a recurrence of the attack some time, say thirty minutes, when I repeated the dose. Shortly after taking the medicine another convulsion followed, though not so severe nor lasting so long. After he had recovered sufficiently, he was aroused with great difficulty to take the chloral mixture; after another half hour, I gave another dose, when only slight symptoms of spasm ensued.

This was the last attack; the mixture was ordered to be continued every three hours during the day. On examination the next day, I found that his bowels had acted freely, though I afterwards gave a mercurial cathartic with the view of arousing his torpid liver into action. He suffered considerably with headache during the day, until afternoon, when he fell into a tranquil sleep which refreshed him very much; slept well also at night after taking a dose of the mixture. Next day was up a little, suffering no headache—only from weakness and soreness, due to the convulsions as well as the fall from the bed.

The convulsions in this case were, no doubt, brought on by the arrest of the secretions, notably the liver, though the kidneys were not acting as freely as they should. The indication was to relieve the constipation and arouse the liver, the prime cause, though the repeated convulsions were first to be controlled, which was readily done by the use of chloral. Happily, the constipation was overcome without any means being used, and the administration afterwards of several doses of calomel, combined with podophyllin and rhubarb restored the activity of the liver.

In a case recently of puerperal eclampsia, after blood-letting freely, I used large doses of chloral at short intervals with the most happy effects. In this affection it ranks with chloroform in controlling the convulsions, though it should be used freely in full doses of 30 to 40 grains. In the spasm of children it is the remedy *par excellence*, and in numbers of cases in which I have used it, have never known it to fail.

Danger from the use of chloral hydrate has been apprehended

by some, from it having been alleged to be converted into chloroform in the blood, but this idea has been pretty well exploded. I have never met with any deleterious effects after a constant use of the remedy for more than three years, and consider it equally as safe as any other agent of its class.

The profession should give it an impartial trial in this justly dreaded affection, and after a trial, I am convinced they will always resort to it.

ART. V.—*Ulcerations of the Rectum Simulating Uterine Disease; With Treatment and Remarks.* By THOS. B. WILKERSON, M. D., Young's Cross Roads, N. C.

CASE I.—Mrs. Y., a widow lady, æt. 45 years, of bilious temperament, consulted me June 8th, 1874. She had, until a short time prior to this date, enjoyed good health, except being subject at times to constipated bowels, but the occasional use of mild aperients obviated this temporarily. She complained of some fullness, tenderness and soreness in the lower portion of the abdominal cavity, confined chiefly to the left groin; there was also a constant bearing down, dragging sensation, which was considerably augmented by active exercise. She has, sometimes, difficulty in passing water, and complains of a tired, uneasy sensation in the lower portion of the sacrum, compared to the grumbling of a sensitive tooth. She soon became weary of company, and those sports and pastimes that used to delight her most. Appetite capricious; troubled with cold feet and hands, frequently hovering over the fire in midsummer; sleeps badly, being frequently awakened during the night by unpleasant dreams relating to her malady. Pressure along the descending colon elicited some tenderness, and tympanitic distension more marked over the sigmoid flexure, but gave rise to no pain in the pelvic region. Upon making an examination through the speculum, the lips of the os uteri were found to be slightly pouting but little engorged; an albuminoid like fluid was issuing from the os. On withdrawing the speculum, the finger was passed into the vagina, and when the cul-de-sac of Douglas was reached, some tenderness was noted; and when the neck of the uterus was pushed upwards, the patient experienced intense pain. Some tenderness was felt along the urethral canal upon the introduction of a catheter into the bladder. I then oiled my finger, passed it into the rectum, and about two and a half inches up the bowel. On the left posterior wall an ulcer with raised edges and

tender floor was distinctly felt. Having the lady in the proper position, a cylindrical speculum was introduced into the rectum, and the ulcer brought within the field of the fenestra; its edges and surface were cauterized with nitric acid; its floor or surface was then smeared with chalk paste. But little soreness was developed by the operation. On the third day, an enema was directed to be given morning and night, consisting of two ounces of the following mixture:

℞. Acid. tannic.,
Zinci sulph.....āā gr. xvj.
Glycerini..... ℥j.
Aq. lupuli..... ℥vij.—M.

This enema to be retained half an hour and then ejected. Under this treatment, recovery gradually took place—all sympathetic symptoms subsiding, and up to the present time, the patient remains perfectly well.

Case II.—Mrs. H., a widow lady, æt. 54 years, has been delicate most of her life, requiring great care to avoid the general vicissitudes of life—the least exposure to inclement weather causing some secretory derangement. She was regular in her menstrual effort, up to the menopause, but generally suffered some pain at the commencement of the discharge. When she came under my care in July, 1875, there was marked emaciation, and her general vivacity appeared to be fast waning; the sallow complexion and darkened hue beneath the eyes, plainly stamped her the prey of disease. She complained of a constantly distended uneasy feeling over the pelvic region; dull pain along the sacrum, and an aching sensation extending from the left groin along down the left labia majora to the point of the coccyx. She had frequent attacks of nausea and vomiting, attended with severe headache; has had for the last twelve months prior to my first visit, slight leucorrhœal discharge; bowels in the main constipated, but occasionally subject to violent diarrhœal outbreaks, difficult to control at times—due, she thought, to some dietary indiscretion. These attacks are marked by considerable rectal tenesmus. When the urine became highly acid, vesical irritation set in. Upon introducing the finger into the vagina, little abnormal derangement could be detected in the uterus; but on pressing firmly on the floor or posterior portion of the left vaginal wall, the patient was conscious of some pain. The tactile examination not warranting the belief of any organic disease of the uterus or bladder, I made an exploration of the rectum with the finger, and about three inches up the bowel, on the left anterior wall of the rectum, an ulcer was detected about the size of a silver half dollar. The speculum was introduced, the ulcer cauterized with nitric acid, and its surface covered with chalk paste.

She was confined strictly to bed. There being some tenderness and soreness present, arising from the operation, a flaxseed poultice was directed to be applied to the lower portion of the abdomen; she was also to have, morning and night, an enema containing plumbi. acet., grs. v, pulv. opii, gr. j, to the ounce of slippery elm mucilage. There being some derangement about the stomach as evidenced by flatulent distension with acid eructations after eating, together with an irritable condition and want of tone in the alimentary tract, the following pills were directed to be given thrice a day:

℞. Argenti nitratis.,
Pulv. opii..... aa grs. viij.
Bismuthi subnitrat..... gr. xlviij.
Pepsini sacchar..... ℥ss.
Strychniæ sulph..... gr. ss.

M. et fit pill. no. xxiv.

Under this treatment an amelioration of the symptoms was soon evident. After a subsidence of some of the irritation in the rectum, the following alterative wash was substituted for the anodyne, two ounces to be given by enema once a day, to be retained for a short time, and then discharged:

℞. Cupri sulph.....grs. xvj.
Extr. belladonnæ.....gr. iij.
Sodæ biborat.....℥ss.
Glycerin.....℥j.
Mucilag. ulmi.....℥vij —M.

This lady made a good recovery, and for one of her age retains remarkable control over her bowels up to this time.

Case III.—Mrs. D., multipara, æt. 25, of nervous temperament, enjoyed good health up to the time of her last confinement, during the year 1875. Labor was tedious—footling presentation subjecting the rectal walls to long continued pressure before delivery was effected. Two months after this time, she began to complain of a constant sense of uneasiness, and occasionally, acute pain darted along the line of the linea alba, from the pubis to the umbilicus, and branched off from the median line toward the left iliac fossa, darting through from the latter point towards the sacrum. There was a regular, heavy, bearing down feeling in the lower portion of the abdominal cavity, and when she was stooping forward or bending far over to the right side, she experienced considerable pain, and could apparently feel the weight of some body impinging on the rectum, giving rise to the desire to empty the bowel and bladder. The sense of distension and uneasiness was so firmly fixed in the mind of the patient, that it required all the sophistry that I possessed to convince her that no abnormal growth existed. This sensation was most clear-

ly felt whenever the bowel became loaded with feculent matter, or when it was flatulently distended. There was, at times, great vesical tenesmus; bowels constipated—the patient going for ten days at a time without having an alvine evacuation. A tired sensation was ever present in the sacral region. Any exercise brought on great exhaustion; she took but little interest in household affairs, and was a prey to nervous headache. There was a free vaginal leucorrhœa, and the sexual act gave rise to great pain. Defecation was exceedingly difficult and painful. Frequently after a partial evacuation of the contents of the rectum, the patient could plainly feel the pressure of some body on the bowel, completely preventing the passage of any more fæcal matter beyond this point; and so horrible was the idea that the mere desire to go to stool often brought on a severe nervous rigor. This would begin with a pain in the lower portion of the abdomen, extend upward in a serpentine course to the stomach, thence rise into the œsophagus as the dreadful globus hystericus, and produce a choking, suffocating feeling in the throat, attended with severe nervous exhaustion. Her feet and hands would become cold, and a cold clammy perspiration would bathe the entire surface. The uterus and vaginal walls, examined both by finger and speculum, disclosed considerable engorgement of the mucous membrane of the os, and some tenderness was noted on the introduction of the uterine probe; marked pain existed along the middle of the recto-vaginal septum, and to the left of this line. On introducing my finger (the patient under the influence of a forty grains dose of chloral), about two and three-quarter inches up the gut, two ulcers were felt, one on the anterior middle—the other on the left posterior wall of the rectum. A speculum was introduced, and the ulcerated surfaces were thoroughly cauterized with nitric acid, and the chalk paste was used to neutralize the free acid. She was given, morning and night, the anodyne lead enema, and instructed to keep the recumbent position until all irritative symptoms subside. On the fourth day, she was given the turpentine enema (the formula for which is given under the head of remarks), once a day, two ounces at a time, and an occasional laxative was given when necessary. To quiet the nervous symptoms, and tone up the system, the following mixture was given morning, noon and night—tablespoonful at a dose:

℞. Potass. bromidi.....ʒss.
Chloral hydrat.....ʒij.
Syrup. ferri iodid.....ʒss.
Fluid. extr. valerian.....ʒiij.
Tinct. nucis vomicæ.....ʒss.
Aquæ.....ʒvij.—M.

Under this treatment, recovery quickly took place, and since her restoration to health, she has given birth to another child. All the uterine, vesical and general nervo-sympathetic phenomena subsided with the healing of the local rectal lesion. This lady had been under the care of my friend, Dr. P. W. Young, of this county, a distinguished gynæcologist and physician, and to him I am kindly indebted for a portion of the history of the case.

Remarks.—These cases give a brief outline of the complications, differential diagnosis and general plan of treatment pursued by me in such affections. Ulcerations of the rectum should demand the utmost attention of the surgeons, on account of the severity and obscurity of the symptoms frequently noticed in these cases. The symptomatology of these affections is often so completely obscured and blinded by those peculiarly characteristic of neighboring organs as to require the utmost skill and diagnostic tact to prevent a delusion. They are attended with a long train of truly distressing and painful nervous phenomena, requiring all the patience, suavity of manner and cheerful disposition of the medical attendant to quiet the irritable disposition, and to counteract the despondent feelings of the patient, engendered by this malady, and these nervous symptoms will frequently present themselves far distant from the seat of the local lesion.

The physician, meeting with this disease in the female, will often be surprised at the marked similarity of the symptoms presented to those considered diagnostic of a diseased uterus; and especially is the idea apt to be generated in the mind of the existence of cervical endometritis, or possibly, the symptoms may be of a sufficiently grave character to warrant the belief in the existence of corporeal endometritis. The practitioner will often find in these cases that the patient complains of a "tiredness" and general malaise, together with a bearing down, fulness and tenderness of the lower portion of the abdominal cavity, and a disagreeable aching in the sacral region; this uneasy feeling often extends along one or the other sides of the vaginal canal, down the thigh. Upon examining the neck of the uterus per speculum, some engorgement and hyperæmia of the mucous tissue surrounding the os tincæ will often be noted, and, at times, issuing from the cervical canal a thin but tenacious leucorrhœal discharge will be seen. Should the uterine probe be used, no

tenderness will be elicited, unless the point of the probe should chance to impinge on the sensitive portion of the uterus opposite the rectal lesion. But if the physician places his finger under the neck of the womb, and pushes it gently upwards, thereby putting the recto-vaginal septum on the stretch, severe local pain will be felt by the patient. So, in like manner, will coitus frequently be painful, the penis pressing on, or distending the irritable septum. The bowels will generally be found constipated, and pain will be felt in the sudden bending or twisting of the body.

In diseases of the rectum, the patient will, as a general thing, be more comfortable in the erect than in the recumbent position; for whilst lying down, the abdominal viscera press downwards, and the uterine neck gravitates backwards on the sensitive bowel. On the contrary, if uterine disease alone be present, the patient will be more at ease in the recumbent than in the erect position. There is also in ulcerations of the rectum, as noticed in uterine disease, a marked tendency to a spanæmic condition of the system.

There will likewise be some vesical irritation in these cases. But if the physician keeps cognizant of the fact that these symptoms of uterine and vesical irritation may all be present, and yet be sympathetic in character—due to some other lesion—on making a careful examination of the rectum, he will seldom be led astray in his diagnosis. But should he attempt to treat these symptoms without first relieving the original cause, he will find himself constantly baffled. Months and years will glide by, with fruitless efforts to relieve the disease, and the bright hopes of an early cure, so fondly cherished at first, are ere long sadly blighted, while the vexatious delays in the cure are fast hurrying the invalid to the brink of despair.

If there be any doubt as to the nature of the disease, the surgeon should introduce the finger, well oiled, into the rectum as far up as possible, carefully and patiently examine the entire surface of the bowel within reach of the finger—distending and pressing out the folds of the gut, so that every portion of its surface may be brought in contact with the finger. Should an ulcer exist, it will readily be recognized; its edges will be found

thickened, raised above the level of the surrounding tissue, depressed in the centre and exceedingly sensitive to the touch.

Being satisfied of the existence of an ulcer and its relative position (the patient being preferably in the knee-elbow position, with a sheet thrown over the buttocks, and a small hole cut in the cloth merely to expose the anus to the eye), one of Fergusson's fenestrated glass speculums, or a bivalve speculum, well oiled, should be introduced into the rectum with the utmost care. Having the lesion exposed to view, the ulcer should be cleansed of pus or mucous, and with a dossil of cotton fastened on a small staff, dipped in nitric acid, the diseased surface should be lightly touched, keeping the acid longest in contact with the thickened edges of the ulcer. Then the cauterized part should be covered with a paste made of chalk and water, in order to neutralize any free acid that might be present, and to prevent its coming in contact with the sound parts. After this operation, the patient should be confined to the bed for several days. Should any soreness or tenderness be developed in the lower portion of the abdomen, thin linseed poultices applied to the region complained of will be of great service. The bowels, having been thoroughly emptied before the operation, should be allowed to remain quiescent for a few days. After the expiration of a few days, the use of enemata should begin. In the choice of a remedy, such an one should be selected as can be allowed to remain permanently in contact with the diseased tissues without becoming absorbed into the system, and thus proving detrimental; for it is a generally conceded fact that the longer the wash can be allowed to remain in contact with the diseased part, the greater will be the benefit to be expected. Such an injection I can recommend to the profession in the highest terms. The local use of the oil of turpentine in these cases has proved to be a valuable remedial agent, acting as an alterative and gentle stimulant, quickly changing the indolent character of the ulcer. It also tends to soften and break down those scybalous masses which prove so troublesome in these diseases; and it can safely be allowed to remain in the bowel. The following is the formula used:

℞. Olei terebinth.....ʒiss.
Mucilag. gum acaciæ.....ʒss.
Mucilag. ulmi.....ʒviij.—M.

S. Two ounces to be given as an enema each morning.

The slippery-elm mucilage in the above prescription should be thick and ropy. A vessel capable of holding the requisite quantity of water should first be half filled with finely chipped elm-bark; then the vessel is to be filled with water; allow it to stand six hours. The saturated bark should then be put in a muslin rag, and all of the viscid matter squeezed out by the pressure of the hand. When properly prepared, it can scarcely be taken up with a spoon. This mucilage, besides serving as a menstruum, proves a valuable sheathing sedative to the irritable bowel. In my opinion, an enema ought never to be given in these cases of more than two fluid ounces at any one time; for there is a constant tendency to an accumulation of scybala above and behind the raised edges of these ulcers, which block up the canal, while the canal outlet is firmly closed by the sphincter ani. Hence that portion of the rectum between these two points will alone be the part unduly distended, and the practitioner can readily imagine the amount of pain inflicted on the patient, and the great injury likely to occur to the highly irritable and inflamed bowel under such circumstances. Even admitting that there is no fecal matter in the bowel, as soon as a portion of the fluid thrown in, comes in contact with the ulcerated surface, an immediate spasmodic closure of the bowel will take place above the ulcer, thus preventing the passage of any of the liquid up the bowel. Patients will frequently call the attention of the surgeon to this fact, that a short time after taking an enema, they will distinctly hear a gurgling noise, showing that the spasm has yielded to the pressure of the injection, and that the liquid is passing up. Should it be desired to unload the rectum, an enema of a small quantity of olive oil, combined with a little ox-gall, will safely accomplish the object.

In giving injections, if the woman is placed on her knees and elbows, she will suffer much less; for in that position, the abdominal viscera gravitates forwards and the uterus follows the same course, thereby relieving the distended rectum from the pressure of these organs. The occasional use of mild laxatives by the mouth will be of service to keep the bowels in a soluble condition.

ART. IV.—*Cases Apparently Showing that Quinine does not possess Oxytocic Virtues—With Remarks.* By WALKER A. HAWES, M. D., New York City.

CASE I.—*April 20th*, 1877. I was called to see Mrs. C., whom I found in labor at about the sixth month of pregnancy. The waters had escaped, and the os was about the size of an old-fashioned silver dollar. Both feet and the head presented,—the first complication of the kind I had ever seen, and one that could scarcely happen with a live fœtus at term. I introduced my hand into the vagina, and pushed the feet out of the way, so that the head only presented; but as my hand was being withdrawn, the cord came down in the space just occupied by the feet. As the fœtus was not viable, I did not attempt to replace the cord.

The feet being out of the way, with nothing but a small head presenting, and the pains being fair, a quick delivery was confidently expected; but after waiting an hour, to my disappointment, I found that the pains, instead of increasing, decreased in force and frequency. Wishing to try the virtues of quinine as an oxytocic, twenty grains of the sulphate were obtained in two doses of ten grains each, and one of these powders was administered at once. After the lapse of an hour and a half, the pains not having increased, the other dose was given; having waited two hours longer, without effect on the character of the pains, a fluid drachm of Squibb's extract of ergot was administered. In from twenty to thirty minutes thereafter, the pains came on with force, and in a short time the fœtus was expelled.

The only cause that could be discovered for the premature labor, was an extensive laceration of the cervix uteri, (extending through the utero-vaginal junction a little to the left of the median line in front) which was produced during the performance of version, for a shoulder presentation at a former labor. This laceration of the cervix extended into the bladder, forming a vesico-vaginal fistula, which I successfully operated on, assisted by Dr. G. T. Harrison, of this city, about twelve months before the present labor. That the fistula was caused by the rent in the cervix uteri, and not by prolonged pressure resulting in sloughing, as is usually the case, is shown by the facts that urine was escaping from the vagina (as I learn from a physician who saw the case), certainly two days after labor, and probably earlier. This was too soon for it to have been likely that sloughing caused

it; secondly, the labor had lasted but a short time before version was performed; and thirdly, because the fistula extended into the upper extremity of the rent—which had to be freshened and included in the highest suture passed for the cure of the fistula.

Case II.—I was called to see Mrs. R. at 5 A. M. on *June 23d*, 1877, who gave the following history: On the evening of the 21st, she was seized with a severe chill, followed by fever, with pain in the back, and intermittent pains in the lower part of the abdomen, with a slight discharge of blood from the vagina. By the morning of the 22d, the fever, pains and flow of blood had passed off, and she went about attending to her regular duties, but on the evening of the 22d she was taken with a severer chill than on the previous evening, which was accompanied by more severe pain and by a return of the hæmorrhage, which was slight. When I saw her, she had a pulse of 110 and an axillary temperature of 103° F., dry tongue, thirst, and quite severe intermittent pains in the pelvic region, with constant pains in the back and a slight discharge of blood. The immediate indications were to stop the pains, and so prevent, if possible, the threatened abortion; and second, to prevent a return of the chills, which I considered to be malarial, and which I thought, from the history, to be the chief cause of the threatened miscarriage. So I gave morphia combined with a diaphoretic in sufficient doses, and ordered the medicines to be repeated every two hours till the pains ceased. At 12 M. of the same day I visited her again, and finding that the fever had disappeared, and that she was pretty free from pain, I ordered fifteen grains of sulphate of quinia, which was taken at 12:30 P. M. in one dose. I did not see her again till 3 A. M. of the 24th, when I found that a fœtus between two and three months old had been expelled at 10:30 P. M., and that since that hour she had been suffering with severe pains. She stated that about half an hour after taking the quinine she had a chill, followed by thirst and other evidences of fever, but that she had no return of pain till 10:30 P. M., when a slight pain came on, and the fœtus was expelled.

Remarks.—Now can any one claim that the quinine affected the expulsive power of the uterus in either of the above cases in the least degree? In the first case, twenty grains failed to increase the pains at all after the lapse of three hours and a half after the first dose of ten grains, and two hours after the second. In the second case, if the quinine had any effect whatever on the uterus, it was not manifested till ten hours after it was taken, by which time, under ordinary circumstances, the effects of the

drug have usually passed off. According to my experience (and I have taken, as well as given, a good deal of it), quinine produces its full effects if taken on an empty stomach, as was the case in both of the above cases in from two to three hours, and the effects begin to diminish in about six hours, and in from nine to twelve hours have disappeared completely; deafness being the symptom that I have found to remain longest—frequently longer than the time mentioned. Taken on an empty stomach, a full dose of quinine, dissolved in sulphuric acid, will produce the characteristic head symptoms in less than an hour.

Now, the question arises: Might not the threatened abortion have been prevented had the quinine been given soon enough to have stopped the chill? Are not most of the cases reported of the oxytocic effects of quinine merely *post hoc?* Any one who has had much of obstetrical practice has seen many cases where the pains dragged for a long time, and then all at once come on with severity when nothing had been given, and no cause could be discovered.

As an illustration of how suddenly pains will increase in violence without apparent cause, I am induced to relate the following:

About a year since, I was called about 2 A. M. to see Mrs. B. in her first labor. She was found with moderately severe pains, and the os dilated to about an inch and a half in diameter; the bag of waters had broken about forty-eight hours previously, and she had been suffering with moderate pains since. Thinking that labor would last till morning, and in all probability till late in the day, as she was quite nervous and would not assist the pains by bearing down, I gave her one-third grain of sulphate of morphia, and after leaving instructions for the dose to be repeated in two hours if she still continued to shrink from the pains, I left for home. I had not been in bed half an hour when I was aroused by the husband and urged to hurry, as the child was born. Not more than an hour elapsed from the first call until my second entrance into the patient's chamber. She informed me that I had scarcely left before the pains came on with great severity, and the baby was born in a very short time, and added that that was "most splendid" medicine that I gave, as she had scarcely swallowed it before the pains became severe, evidently being fully impressed with the idea that the morphia was the cause of the quick delivery, when in fact it had nothing

to do with it. May not many of the advocates of quinine as an oxytocic be as much in error?

Ergot is as surely an oxytocic, on the contracting uterus, as opium is a narcotic. Why, then, should we desert ergot and resort to quinine, which the above cases go far to show is exceedingly uncertain, if not entirely worthless as an oxytocic? Quinine is more disagreeable to take, and more disagreeable in its effects than ergot on most people.

The case of vesico-vaginal fistula shows that it is one of the dangers to be incurred in forcibly entering a non-dilatable os uteri. On looking at the diagrams of the uterus in Professor Thomas' work on the *Diseases of Women*, and in Wilson's *Anatomy*, it would scarcely be thought possible that a rupture could involve the bladder without opening the peritoneal cavity. But if one will examine the cut of the uterus, on page 49 of Barnes' work on *Diseases of Women*, taken from Dr. Favre, it will be seen that the peritoneum does not reach the utero-vaginal junction in front by more than an inch, more than one-third of the uterus in front being void of peritoneum, if the cut is correct. Gray and Barnes state that three-fourths of the uterus in front is covered by peritoneum, so that if they and Dr. Favre are correct, we can easily see how a rupture might involve the bladder and not the peritoneal cavity.

221 *E. 62d Street, New York.*

Clinical Reports.

A Case of Bony Formation in the Place of the Lens. By W. J. McDOWELL, M. D., Assistant Surgeon Baltimore Eye and Ear Infirmary.

Formations of true bone within the eye ball are met with very frequently, indeed by every ophthalmic surgeon in active practice. But these changes are, almost invariably, found to have occurred in those structures which are rich in connective tissue and abundantly supplied with blood (e. g. the choroid coat).

A case has recently come under my observation in which the ossification had occurred in so very unusual a situation, that I think it worthy of record.

A few weeks ago I assisted my friend, Prof. J. J. Chisolm, of this city, in the enucleation of an eye-ball which had been lost from injury. The patient, a little girl of seven years, had, four years ago, while playing with a breastpin, stuck herself in the eye. The pin perforated the cornea, iris and lens, and a destructive irido-cyclitis ensued which resulted in loss of sight and atrophy of the globe. The injured member gave little or no trouble until two or three months ago, when symptoms of sympathetic trouble manifested themselves in the other eye. The child was placed upon the table, chloroform administered, and the globe extirpated after the usual method.

On cutting into the eye-ball after its removal, the disorganized and fluid vitreous escaped, but the aqueous fluid, as seen through the clear cornea, remained *in situ*. This led me to carefully examine the iris, lens and cilliary structures.

I found the aqueous chamber entirely shut off from the vitreous by a septum of organized lymph, in the centre of which was a hard, whitish substance which I at first took to be a calcareous lens, for it resembled the lens both in size and in shape. Upon closer examination, however, I found that instead of being hard and brittle, it was tough and bone-like. Upon suggesting to Prof. Chisolm the possibility of its being bone, he kindly gave me the specimen for a more minute examination. After placing it in a decalcifying solution of chromic and nitric acids, and allowing it sufficient time to digest, I made microscopic sections. The result was confirmatory of my conjectures, for the lacunæ, canaliculi and Haversian canals, with the lamellæ could be distinctly made out.

I do not regard it at all probable that the substance found was in reality an ossified lens, although it was situated exactly in the place of the lens. But I am rather disposed to account for the presence of the bone in this locality in another way.

It will be remembered that the lens was lacerated by the pin when the eye was injured. This laceration of the capsule must necessarily have resulted in disorganization, liquefaction and absorption of the lens substance. This will account for the absence of the lens. As a result of the injury, also, an intense irido-cyclitis ensued; a large amount of plastic lymph was thrown out upon the cilliary body, iris and lens capsule. This lymph, drawing ample nourishment from the vessels of the iris, became organized, forming connective tissue, and subsequently underwent ossification.

There are. I believe, only two or three cases on record in which bone has been found in the place of the lens, one of which was reported by Dr. P. D. Keyser, of Philadelphia, at the last meeting of the International Ophthalmological Congress, which was held in the city of New York, September, 1876. (See *Transactions of Fifth Ophthalmological International Congress*, page 131).

290 *Madison Avenue.*

A Case of Successful Extirpation of the Parotid Gland. By J. M. PACE, M. D., Camden, Ark. (Read before the State Medical Society of Arkansas, May 2, 1877).

In regard to the extirpation of this gland, a great many surgeons of eminence have doubted the practability of the operation, and questioned the fact of its having ever been performed. Velpeau says, "should we take literally true, what authors of the last century have said of it, nothing could be more simple than the total eradication of the parotid gland. In our own times, on the contrary, nothing seems to be more uncommon—so much so, that numerous distinguished surgeons deny even its possibility." He also states that most of the cases reported, are not conclusive, believing with Boerhave and others, that in most instances, it was merely ablation of lymphatic tumors, developed in the depths of the parotid space. Allan Burns thought the operation impracticable. Cooper, however, says, to deny that the gland was ever extirpated, would be to impeach the veracity of some of our most eminent anatomists and surgeons; that no one will doubt the danger attending the operation; but to assert that it cannot be performed, is not only absurd, but not in keeping with the progress of the age.

Siebold professes to have extirpated the gland in 1796; Beclard in 1823: Gensoul, 1824; Prieger, 1826. Subsequently a host of other surgeons claim to have performed the operation. The late Dr. Geo. McClellan, of Philadelphia, is foremost in the ranks of American surgeons, having operated upon *eleven* cases with but one death.

Tumors—malignant and non-malignant—are often developed in the parotid gland the nature of which it is often no easy mat-

ter to diagnose by merely superficial examination. Encephaloid tumors usually grow rapidly, attaining a large size. Scirrhus is more slow in its development, smaller in size, and very much more painful, though the latter symptom is not always pathognomonic of cancer; for even fibrous tumors, often cause intense pain from pressure upon the surrounding nerves. Scirrhus tumors are usually solidly fixed, with ill-defined outlines; whereas, fibrous tumors are more movable and the mass is well defined.

The case that I have to report, as regards its malignant or non-malignant character, was hard to distinguish, not only because of the usual difficulty of diagnosing these morbid growths, but its extirpation had been attempted by another physician some months previously, which left a cicatrix and the surrounding integument in a glazed, purplish condition, and a tumor with ill-defined outlines, more or less resembling a malignant growth.

The subject was Miss L., aged about 27 years, of a lymphatic temperament, general health good. Before proceeding to operate, I gave her in detail, all the results that might follow such an operation, and especially the facial paralysis, quoting from Prof. Gross, who states in his Surgery, that removal of the parotid is *always* followed by paralysis of the corresponding side of the face, in consequence of the division of the motor branch of the seventh pair of nerves. She was not to be frightened or detered from the operation, but at once decided to have it out.

Accordingly, on the morning of the 26th of November last, she was placed upon the operating table, on her sound side, with her head and shoulders elevated. With the assistance of Drs. Bragg and Hudson, she was thoroughly anæsthetized by chloroform, when I proceeded to operate as follows: A single incision was made in front of the ear, extending from near the zygomatic arch to about one inch below the angle of the jaw; after this, the flaps were dissected up the entire length of the incision and the tumor loosened. I accomplished the rest of the operation by pulling and tearing with my fingers, aided with the handle of the knife, using the blade as little as possible. I, in fact, enucleated almost the entire gland by piece meals, beginning at the lower portion of the tumor and separating it upwards, for the reason that, should there be any hæmorrhage, I could more easily control it, for there would be but one division of blood-vessels requiring ligation. Fortunately, there was but one small collateral branch of the temporo-maxillary artery divided, which was at once caught up and twisted, and it gave no further trouble.

During the operation, I avoided the division of the facial nerve. After the extirpation of the gland, the digastric and stylo-hyoid muscles, and the external carotid were exposed, leaving but little doubt of the extirpation of the parotid gland. Fearing no further trouble from hæmorrhage, the wound was closed with five interrupted sutures, and a few strips of adhesive plaster, after which cold water dressings were applied.

The second day after the operation, at her earnest solicitation, the patient was permitted to leave her bed; on the third day the sutures were removed. The wound healed by first intention.

Correspondence.

Correction.*

QUINCY, ILL., July, 23, 1877.

Mr. Editor,—In the July number of the *Medical Monthly* in your report of the proceedings of the American Medical Association, Section of Obstetrics and Diseases of Women and Children, page 288, appears a statement that does me very great injustice, as follows: "Dr Kendall, of Quincy, stated that the sketch accompanying the paper was a fanciful one. The patient who had been previously under his care, had merely an ordinary thickening of the urethra from syphilitic deposit." This statement, I understand, was made by Dr. Kendall in regard to one of the cases I reported in a paper entitled "Surgical Treatment of some Diseases of the Female Urethra." Such a statement, uncontradicted, would lead members of the profession unacquainted with me to believe that I would write out hypothecated cases that I might appear before the public. Such a statement coming from Dr. Henry W. Kendall would need no refutation among the physicians who know him, as the source without corroborative evidence would be sufficient for it to be supposed to be false. But, being published in your journal and read by those who do know him, they may be so unfortunate as to believe him much to my discredit.

When I sent my paper, which was purely original, and wholly

* While the letters here presented might have been shorter, yet we cheerfully give it place, since we have been one of the innocent instruments of damage to Dr. Byrd. If Dr. Kendall has been guilty of the baseness which the above testimony indicates to be a fact, and has, without cause led the medical press of the country to do Dr. Byrd this great injustice, he should be kicked out of society, as well as the profession. Our reports of the Proceedings of the American Medical Association were compiled from the authorities named at the bottom of the first page (273).—ED.

true, to be read before the American Medical Association, I doubted being able to attend, being pressed with business; but a prominent physician of this city informed me if I did send a paper there, I had better go and be present when it was read, as he had learned from Dr. Kendall in conversation with him that he (Kendall) was going to Chicago with the intention of doing me all the harm that he could. I then received a programme stating that my paper would be read Thursday. Tuesday evening I started for Chicago, arriving Wednesday morning, expecting to read my paper the next afternoon, when I was informed that Dr. Battey had read it Tuesday, by that means allowing Dr. Henry W. Kendall to make his false and libelous statement without fear of contradiction. I knew nothing about what Dr. Kendall had said in the discussion of the paper until I got home, when I heard of his telling around that I was afraid to be present at the reading of my paper, and that he had stated in the Section that I had reported falsely, whereupon the paper was found unworthy of publication. I then commenced getting evidence to send Dr. E. W. Jenks, of the Publishing Committee, to show wherein I was wronged, but concluded that such small game was not worth the powder, and that I would drop the matter until I should see the statement coming from some reliable source. Now, you and your journal are reliable; I therefore submit the proof, believing you will do me the justice to publish it so as to rectify the damage you have done me by publishing the other statement.

I had not seen the patient for several months until the morning of July 13th, 1877, when, in company with Dr. L. H. Cohen, of this city, I met her, when the following conversation ensued: "How long had you been under Dr. Kendall's treatment before I operated on you?" "Four years." "How often did he operate to enable you to pass water?" "Every six weeks or two months for four years." "How long is it since I operated on you?" "It will be two years this coming winter." "Have you had any trouble in passing water since I operated?" "No." "Have you ever had syphilis?" "No." "Has Dr. Kendall treated you since I operated?" "No; there was no necessity, as I was well."

There was no indication of syphilis about the case, except in Dr. Kendall's fertile imagination, and if it had been syphilitic thickening, why did not Dr. Kendall extirpate it and cure the case at once, as I did, instead of keeping the poor woman suffering four years?

I send herewith letters that I got from Drs. John W. Miles and Wm. C. Pipina corroborative of my statements, and also a

letter from Mr. Samuel Fox, one of the best biologists in our city. These are gentlemen whose words are unimpeachable, something, I regret very much to say, cannot be told of Dr. Kendall. I have yet the tumor in my possession

I regret taking up so much of your time, but I believe you, with the great majority of Virginians, believe in truth and *justice*. Yours truly, WILLIAM A. BYRD,

President Adams County Illinois Medical Society

QUINCY, ILL., June, 22d, 1877.

Prof. E. W. Jenks, M. D., Detroit Mich.:

Dear Sir, - Being informed that there has been a doubt thrown on a statement made by Dr. W. A. Byrd in regard to an operation performed in my presence, I take the opportunity to impart to you the facts in regard to the operation in question:

On the 28th day of February, 1876, Dr. Byrd, in the presence of Drs. Heitz, of Hannibal, W. C. Pipino and myself, of Quincy, removed from the urethra of a female patient what seemed to me to be a very unique structure. The growth encircled the meatus urinarius completely. It was about three-fourths of an inch in diameter and one-fourth of an inch in thickness; was perforated in the centre by an opening large enough to admit a number one catheter. The growth was a very firm substance—probably a hyperplasia of fibrous tissue.

Yours, very respectfully,

JOHN W. MILES, A. M., M. D.

QUINCY, ILL., July 21st, 1877.

Prof. E. W. Jenks, M. D.:

Dear Sir,—Having also heard of the doubts expressed in regard to the veracity of Dr. Byrd in the above-mentioned case, I fully concur with the statement expressed by Dr. Miles.

Respectfully, W. C. PIPINO, M. D.

QUINCY, ILL., June 22, 1877.

Landon B. Edwards, M. D.:

Dear Sir,—My attention was directed yesterday to an item in your *Monthly* under the caption of "Section of Obstetrics and Diseases of Women and Children." Ignorance must have been manifested by one of Dr. Byrd's critics as to the nature of the case reported in his paper upon the surgical treatment of disease of the female urethra. You may, if it please you, inform Dr. Kendall that in the belief of your correspondent the case was a "*tumor* proper," and not, as he intimated in his objection, "a mere thickening of the membranes of the meatus urinarius." Not only did I see for myself the actual specimen preserved in

alcohol from which I carefully executed the drawings as presented with the aforesaid paper, but the husband of the patient happening to come in and to see me at work, also certified that my representation was a faithful one. Without my engraving, he simply told me "that was from his wife, and he was well pleased with the skill which had been used to remove it from her." In answer to his question of "Did I know who I was drawing?" I said I did not, and that as I had not been there to see, he could afford to excuse me. So far from the sketch being a fanciful one, as Dr. Kendall says, I may refer to the engravings which are so well known to all students, from which I draw my models, and will call them entirely fanciful and unworthy of the text-books, if mine was so.

Very truly yours, SAMUEL FOX.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

Tobacco Amaurosis.—In *Le Progrès Médical* for the 2d of June last, M. Guelliot has an article on this subject. He reports five cases of the affection and one of *alcoholic* amaurosis, and then gives the differential diagnosis between the two, stating that they have been confounded by nearly all writers on the subject. His observations seem to have been made with great care. He states that in every instance he was careful to inform himself exactly how much tobacco was smoked by the patient per day. In every instance smokers were affected, and he saw no one in whom the disease had been produced by taking snuff. He gives the following tabulated statement of the symptoms presented by his patients: (1) Tobacco amaurosis always commences in one eye, and is never bi-lateral at the beginning of the attack; (2) The right eye is usually affected first, though Hutchinson and Apostoli differ with the author on this point; (3) In the commencement of the attack, the patient sees as through a mist, which becomes thicker and thicker as the disease advances; (4) As the disease advances, a central scotoma appears in addition to the general mist; the existence of this central dark spot is denied by Follin, but admitted by Apostoli and Wecker; (5) Wecker states that the central acuity of vision is first affected, while that at the periphery is normal; (6) The pauis mentioned by Apostoli, and the cephalagia of which Follin speaks, were never encountered by Guelliot; (7) Objects, when viewed through

the mist, sometimes appear yellow to the patients, as Wecker has remarked; (8) There was never any confusion of colors, in spite of what the majority of writers say; (9) The patients always saw worse in the evening; (10) The pupils are almost always contracted and immobile; (11) The disease, which runs quite a rapid course, may terminate in atrophy of the disk, which Hutchinson observed once in three cases.

Guelliot gives the following differential diagnosis between tobacco amaurosis and alcoholic amaurosis: (1) Alcoholic amaurosis commences usually in both eyes at once, while tobacco amaurosis is at first uni-lateral; (2) While the central scotoma may exist in both diseases, muscæ volitantes are only seen in tobacco amaurosis; (3) In alcoholic amaurosis there is confusion of colors, which is never observed in amaurosis from tobacco; (4) in alcoholic amaurosis, there is frequently pain, which is never the case in tobacco amaurosis; (5) In alcoholic amaurosis, the patient sees better in the evening, while the reverse is true in tobacco amaurosis; (6) While both forms of the disease may terminate in atrophy of the optic papilla, the course of the amaurosis caused by tobacco is much more rapid.

The two symptoms which M. G. states have been overlooked heretofore, and which he considers quite characteristic of tobacco amaurosis, are that: (1) The patients see better during the day than when evening comes on; (2) They never confound colors.

The Effect of Compression of the Ovary in Recent Hysterical Contractions.--It has long been known that while hysterical paralyses and contractions usually disappear without leaving any trace of their existence, they are nevertheless frequently of long duration, and may ultimately lead to such changes in the lateral columns of the cord, or in the muscles, as to preclude all hope of a favorable termination. As a general rule in these cases, there is very decided tenderness of one of the ovaries; and it has been found that if this tender organ be compressed quite forcibly, it frequently causes a cessation of the attack. Some months ago, a case of hysterical mutism, in which there was at the same time great difficulty in swallowing, was reported by MM. Lionville and Debove, which was promptly and permanently relieved by compression of the left ovary, which was the one affected in this case. The affection had existed for a long time and was of a very high grade.

Bourneville, one of the most distinguished of M. Charcot's pupils, and the editor of *Le Progrés Médical*, has recently reported three cases of hysterical contraction which were promptly relieved by compression of the ovary. In one of these cases the limbs on both sides were affected with rigidity, which had been

preceded by obstinate hiccough. The contraction in this instance had lasted but an hour and a half when the ovarian compression was practised. In a second case, the rigidity was confined to the right side, and the patient presented as "permanent symptoms" of hysteria an amaurosis of the right eye, a hemi-anæsthesia, and a hyperæsthetic ovary on the same side. The contractions in this case lasted several days, and were always promptly relieved by compression of the ovary. Deafness was also a frequent symptom in this case, which was relieved in the same manner. A third case was in the person of a patient who suffered from frequent attacks of hystero-epilepsy. After one of these attacks there remained a spasmodic contraction of the muscles of the jaw and of the abdomen. She was promptly relieved also in the same manner.

[The Translator practised this treatment in a very severe and intractable case of hystero-epilepsy, about eighteen months ago, with perfect success.]

The Percussion of Bones.—Prof. Lücke, of Strassburg, read a paper on this subject before the "Gesellschaft für Chirurgie." He thinks the percussion of bones of service, both on account of the difference in the sounds of diseased and healthy bones, and secondly, as serving to bring to light any tender points, if such should exist. For example, he states that an osteosarcoma may frequently be diagnosed by the excessive tenderness of the bone at the diseased point when percussed. Even Piorry had observed the difference in the percussion sound of the bones and the soft parts; of a mastoid process filled with pus and one which was healthy; of a healthy and diseased frontal sinus. Lücke cautions against judging of the sound when the limb is in contact with a resonant surface; if in contact with the floor, there will be an unnatural percussion sound. The diaphysis of a tubular bone gives a deeper sound than the epiphysis. Bones separated from the joints, but covered with the soft parts, exhibit the same peculiarity. The percussion tone of a short bone, like the calcaneum, is similar to that of the epiphysis. The abnormal sounds are different in different diseases. In infiltration of the marrow of the bones, the percussion sound is much deeper than normal—the tone of the epiphysis becoming like that of the diaphysis. This occurs in chronic inflammation of the central part of the epiphysis, in abscesses in the same situation, and in those cases where there is a large amount of callus. If the bone is thin and porous, the percussion note is abnormally high. Lücke thinks that by this means inflammation of the bones, abscesses, &c., may be diagnosed at a much earlier date than in any other way, and at a time when they are much more amenable to treatment.

The Use of Ergot in Chronic Catarrh and Fibroma of the Uterus.—Dr. K. Goreleitschenko (*Rundschau*, May, 1877) recommends, as a substitute for the administration of ergot by the mouth or by hypodermic injection (to both of which modes there are serious objections) pencilling the cervical canal with a solution of ergotin—

℞. Ergotin ..... 5ij.
Glycerine, and distilled water ..... aa 5ij.

He dips a camel's-hair pencil in this solution, passes it into the cervical canal, and allows it to remain there from one to three minutes.

He has practised this mode of treatment in 29 cases of chronic catarrh combined with chronic metritis. In 22 of these cases the secretion of mucus was checked, the engorgement of the mucous membrane disappeared, and the uterus itself became smaller and firmer. The subjective symptoms also improved, and menstruation came on normally. In 7 cases there was improvement, but a relapse soon occurred. In all these, the uterus was very much enlarged, and the blood was very thin and poor. One patient only one or two hours after the application to the uterus complained of spasmodic pains and faintness. In four cases of fibroma, in which the treatment was tried, neither it nor the subcutaneous injection of ergot did any good.

[In cases of cervical metritis, the Translator has used vaginal suppositories of Squibb's solid extract of ergot and extract of belladonna with most excellent results.]

Proceedings of Societies.

AMERICAN NEUROLOGICAL ASSOCIATION.

The Third Annual Session convened in New York city, June 6, 1877, and was called to order by the President, Dr. J. S Jewell, of Chicago; Dr. E. C. Seguin, of New York, Secretary.

In his *Inaugural Address as President*, Dr. Jewell remarked that in the cultivation of neurological science for the future, there are several things he would be glad to see realized. The first is, that in this country, henceforth, more attention and encouragement may be given to a thoughtful study of the healthy anatomy and physiology of the nervous system. No doubt there are many now among us who are endeavoring to keep pace with the progress in these fundamental departments of neurological science, and some few endeavoring to confirm or enlarge the boundaries

of actually existing knowledge; but it cannot be denied that thus far very little comparatively has been done and made public, in our own country, towards advancing a knowledge of the normal anatomy and physiology of the nervous system. The reasons for its neglect thus far, whether good or bad, have now in a great measure passed away. The time has now come—and with it the opportunities—when we should undertake to make some solid contribution in this department of our work. To excite and encourage, and beyond this to prosecute such researches, should be one chief object of the existence of such a society as ours.

Then, again, we need not less experiment, but more care as to the method and results. There is, relatively speaking, too little close, accurate thought, as compared with the mere observation of facts. The mere discovery of a new fact by sense of observation does not insure that the discoverer will ascertain its significance. What he means to declare is, that mere sense observation has outstripped. and does this very hour outstrip, critical, careful thought. What we need is, not mere observers nor mere thinkers, but more men who, like Bacon, Harvey, Bichat, and others, can not only observe, but, like them, think.

Less reliance should be placed on the records of pathological cases, as they exist in the literature of the past. With a better knowledge of the anatomy and physiology of the body, with a broader range and basis of established facts than ever before, and with greatly improved methods for research, we are able happily to lay a surer foundation, let us hope, for trustworthy deductions.

As to the organization and working of the Society, he is of the opinion that the Society is about as large as it ought to be until it has lived a little longer and done more good work. He does not say no new members should be admitted, but for a time let them be few, and admitted with caution. Then, again, the Society should continue to hold its next few meetings in the East. The bulk of its members must for a long time be here, and also the means for rendering them attractive. Then, again, the time of meeting should be so changed as not to conflict with other important meetings, which many of our members might feel like attending. In regard to the publication of our papers and discussions, the only things to be done are either to publish an inexpensive account of the proceedings and abstracts of discussions and papers, or to publish a volume of transactions. Of these two plans the latter is every way preferable. A subscription of from fifty to one hundred dollars from each member would completely insure the appearance of the volume. To render the work of the

Society more effectual, he recommends a diminution in the number of officers, who should, as now, be aided by a council in discussing purely business questions, which should rarely, if ever, occupy the attention of the Society as a whole; and that the Secretary be charged with the not very onerous duty of editing the materials, employing such aid as he may need. He also suggests the propriety of the appointment of committees to report at subsequent meetings on definite subjects.

Next followed the exhibition of an interesting case, by Dr. William A. Hammond, of New York, which he considered one of **Epilepsy.** The patient, a boy of 18, the Doctor said, might be considered as a case of total moral depravity. He would lie and steal to any extent, without any reason; would steal clothes and other articles, sell them for a trifle, and then give the money away. The boy had been placed in several houses of correction, but they could do nothing with him. In reply to the question, "What makes you do these things?" he said, "I can't help it." He did not seem to be lacking in intelligence. His mother had for a long time noticed blood upon his pillow. Weight of child at birth, one pound. His father is an exceedingly neurotic individual.

Dr. J. J. Mason, of New York, read a paper on **Lead Poisoning in Frogs,** which suggested a new field for experiment. Notwithstanding the important services which experiments upon this animal have rendered in discovering the mode of action of other toxic substances, not even an allusion to the action of lead upon the system of the frog can be found in toxicological literature. The subject was divided into two portions: 1. Acute poisoning; 2. Chronic poisoning. In the former, the poison (acetate of lead) was introduced under the skin; in the latter, by placing the animals in a solution of the same salt. The acute form of poisoning is characterized by paralysis of the heart with preserved integrity of the motor nerves and muscles; while in the chronic form paralysis of the muscles of volition, with their nerves, invariably results, leaving the heart intact. The muscles always show Erb's *entartungs* reaction to electricity, a characteristic feature of lead palsy in man. A ready method is here found of inducing this condition of the muscles at will, and its value in the study of the pathogeny of lead paralysis is suggested to the consideration of the Association. In view of the little we know on this subject, and of the difficulty of obtaining autopsies in man, and failures to induce the same condition in warm-blooded animals, may not much be added to our knowledge by further research on lead poisoning in the frog?

The paper being open for discussion, Dr. Hammond, of New

York, inquired if there was any evidence of lead being in the nervous system.

Dr. Mason could not say, as he had made no examination.

Dr. Jewell: You found no change in the cord, and applied no chemical tests?

Dr. Mason: No, sir; but I wish to do so.

Dr. Jewell remarked that formerly he had considered the trouble in lead poisoning to be central, and even now was inclined to that view, though he had the record of several cases which had raised a doubt in his own mind as to the truth of this.

Dr. Seguin stated that he once had the opportunity of making an observation bearing on this psint. The patient was recovering from lead paralysis at the time he was carried off by a diarrhœa. Examination of the muscles showed the usual degenerative change. Sections through the cervical enlargement showed slight granular change in the ganglionic cells of the anterior horns. At that time (1875) Dr. Seguin took strong ground in favor of a central affection, and is still disposed to this view, though not as strongly as before.

Dr. T. M. B. Cross, of New York, did not favor local absorption, but considered the affected region central and high up.

Dr. J. S. Jewell made a verbal report on the progress he had made in the examination into the **Structure and Functions of the Ganglia on the Posterior Roots of the Spinal, and also of the Corresponding Part of the Cranial Nerves.** His remarks were a continuation of a paper upon the same subject, read before the Association at the last annual session.

He stated that his researches were far from being complete, but to him were suggestive. An important question was as to what became of the fibres which appear to rise from the nerve-cells found in the ganglia in question. Do they pass toward the cord or toward the periphery of the body? The Doctor's first opinion was the same as that held by many others since the time of the early observations of Kölliker—that they pass toward the periphery—but he has since abandoned that opinion. His opinion now is, that they do not pass either way, but that they join the axis-cylinders of the fibres of the sensory root at the so-called "constriction of Ranvier," as these fibres pass through the ganglion. This view he was first led to entertain by seeing preparations of these ganglia made by Dr. Amidon, of New York, and after reading the account of these bodies, given by M. Ranvier, who describes what he calls the "*terminaison en T.*" This mode of termination of nerve-fibres in other nerve-fibres, Dr. Jewell has since ascertained, had been described by R. Wagner, of Gœttingen.

Dr. Jewell has abandoned his opinion that the nerve-cells of th gang lia give off two processes, which connect with either two nerve-fibres, or one other cell and a fibre, or with two cells. He now believes that they are never connected but with one fibre, and that fibre connects, as already described, with the axis cylinder of a sensory nerve-fibre, as it passes through the ganglion. But for what purpose does this connection exist? This question, Dr. Jewell thinks, is fully answered by making sections, in the living animal, of the posterior or sensory root, at one time between the cord and ganglion, and at another on the peripheral side of the ganglion. In either case, Wallerian degeneration sets in, but in a curious manner. In the case of section on the central side of ganglia, the degeneration is toward the cord, not toward the ganglion; while in the case of the section on the peripheral side of the ganglion, the degeneration of the nerve-fibres takes place toward the periphery, and not toward the ganglia. These observations show conclusively that the ganglia exert a conservative influence over the fibres of the sensory nerves throughout their whole length, from the periphery to their implantation in the spinal cord. Here, then, we have a highly probable determination as to the function of the nerve cells in the ganglia on the superior roots of the spinal nerves. They exert an influence on the nutrition of the fibres of the sensory root. Their function is trophic. They are part of a *trophic nervous system*.

Another question arose as to whether these same ganglionic bodies do not exert an influence on the non-nervous tissues of the body, through the sensory nerves with which the spinal ganglia, on the one hand, and the ultimate anatomical elements of the tissues, on the other, stand in such intimate relations. Dr. Jewell announced that it was his conviction that such is the case. The nutrition of most parts of the body is, to a certain extent, and in a certain manner, under the control of the mechanisms found in the ganglia. He did not want it understood that it was his opinion that the nutrition of the body *depends* on either the spinal ganglia or any other part of the nervous system, but that it is to a certain extent under its control. Disease of the ganglia, and also of the spinal cord, may lead to such changes in nutrition as to lead to the so-called idiopathic inflammations we so often witness in the skin and other parts of the body, and indeed any cases involving nutritive change, side by side with changes in blood-supply, which cannot be fairly connected with a local injury, mechanical, chemical, or otherwise. As regards the vascular changes which follow in the wake of irritative tissue-change of presumed neurotic origin, they are to be explained on quite different grounds, since they occur through

the agency of a different class of nervous mechanisms. It was his opinion that the spinal cord contains, in connection with the medulla, and possibly the brain, a central mechanism, which may be properly called trophic, and that the spinal ganglia probably bear the same relation to it that the ganglia on the fundamental chain of the sympathetic, so called, do to the central vaso-motor mechanisms of the cord and medulla.

Dr. Hamilton asked for an explanation of the way in which atrophy occurred, as, for instance, in progressive facial atrophy.

Dr. Jewell replied, using the blackboard to illustrate his remarks, that from a certain nerve-cell, in which we suppose a nerve fibre to terminate, there are given off two or three filaments: one of these passes to another group of cells, a second to another group of cells, and so on. One of these groups has a trophic function, another group has a sensory function, and another group has some other function. Now, it is possible to have this trophic group the seat of disease, which shall be exerted through its cells all along the fibre, while its sensory function remains intact. His belief was that the sensory nerve-fibre conducts all kinds of sensibility. Only in the above way could he explain local inflammation or local atrophy.

Evening Session.—The first paper was by Dr. H. D. Schmidt, of New Orleans, on the **Structure, etc., of Sympathetic Ganglia.** The paper was read by the Secretary, Dr. Seguin. The communication was accompanied by a number of thin microscopic sections, of different ganglia of the sympathetic nervous system, and also some sketches of ganglionic bodies.

The object of Dr. Schmidt's communication was not only to offer an opportunity to those persons willing to devote the necessary time to the examination of the specimens, for convincing themselves of the truth of his former statements; but moreover to direct the particular attention of the Association to the structure of these bodies, each of which seems to represent a complete nervous apparatus in itself, and also to the importance attached to a true knowledge of the particular mode in which the spmpathetic nervous system operates. As the investigation of the structure of these bodies is one of the most difficult in histology, the Doctor considered it necessary that the investigation, in order to recognize this structure, should be able to represent in his mind the exact form in which sections of a complicatod body of a certain form, made in different sections, would appear to the eye. Dr. Schmidt called attention to the fact that in examining the ganglionic bodies, lodged between the double contour nerve-fibres of the *plexus gangliformis* of the pneumogastric nerve, the meshes of the network forming the capsule would be found much

coarser, a fact which rendered these bodies very suitable for research. Attention was called to the fact that from each sympathetic ganglionic body two different kinds of processes arise; the larger of these, having the appearance of true axis-cylinders, are most probably transformed into double contour nerve-fibres, while the finer and shorter ones contribute to the formation of the nervous network of the capsule, from which the fine fibrillæ, forming eventually the sympathetic nerve fibres, arise. Thus we have two different kinds of nerve-fibres arising from one and the same ganglionic body. Now the question arises, does this arrangement bear any relation to the rythmical or peristaltic action of the involuntary muscles? And further, is one kind of nerve-fibre motor while the other is inhibitory? If so, which are the sensory fibres? Another question to be answered is, whether those sympathetic ganglionic bodies, with the nerve fibre arising from them, lodged in the plexus gangliformis of the pneumogastric nerve, bear any relation to the inhibitory action of this nerve? Dr. Schmidt's view is that difference in structure conditions a difference in function.

Morning, June 7th.—The Secretary read the report from the Council recommending the following gentlemen for election as members: Dr. V. P. Gibney and Dr. E. C. Spitzka, both of New York. These gentlemen were unanimously elected.

Dr N. B. Emerson, of New York, read a paper on **Syphilitic Sciatica.** He called attention to the fact that syphilis is very infrequently recognized as a cause of sciatica. Out of the reports of sixty-three medical men, in answer to Lauder Brunton's questions in regard to sciatica, only twelve spoke of the syphilitic form.

There was sufficient clinical and post-mortem evidence for making the statement that syphilitic neoplasmata are capable of producing violent pains and loss of motor function in the sciatic nerve by pressure. Cases were given to substantiate this point. The Doctor considered it established that the syphilitic diathesis is capable of producing neuralgia in the sciactic nerve in some occult manner, without lesion. His reasons are, in brief, as follows: (1). Cachexia is acknowledged to be a frequent cause of neuralgia; (2). Syphilis is a notable cause of cachexia; (3). Syphilitic cachexia and neuralgia are frequently found to coexist, and with relief of cachexia comes relief of neuralgia.

For a diagnosis of syphilitic sciatica, the patient must have been free from sciatica previous to the syphilitic attack; an attack in the late stage of syphilis is more significant than in the early. The prognosis of syphilitic sciatica is the same as that of the syphilis which causes it. The treatment is practically

that of syphilis; opiates may be necessary for the relief of pain; ferruginous tonic remedies should be made use of for the relief of the cachexia.

Dr. Eugene Dupuy, of New York, read a paper on **Hereditary Epilepsy.** It is well known that Dr. Brown-Séquard has discovered that certain lesions of the spinal cord, or the brain, or the sciatic nerve, in Guinea-pigs will give rise to an epileptic malady in these animals. In from three to six weeks after the operation, it is found that an alteration in the nutrition takes place in an area of skin, which is limited by a line starting from the outer canthus of the eye, and running to the median line on the upper lip enclosing the nostril, thence backward, enclosing the lower jaw, to the anterior portion of the shoulder to the median dorsal line, to the base of the ear and inner canthus of the eye. The alteration in nutrition takes place on the side corresponding to the injury. It consists in this, that the faculty of feeling pain, heat, and cold disappear by degrees, while tactile sensation appears to be exalted. In a few days it is found that tickling this zone of skin will give rise to twitchings which are limited to the muscles of the eye and the eyelids on the same side. Later, the muscles of the mouth and of the face participate; still later the contractions become more general, until this whole side becomes the seat of convulsions; then the convulsions attack the other side also.

When things have come to this point, the convulsions precede, by a very short time, a complete loss of consciousness. If the subject of experiment be a white Guinea-pig, it is found that there is paleness of the face, but in all cases there is a little foam at the mouth and dilatation of the pupils. In some cases the animal utters a cry, probably corresponding to the epileptic cry in the human species. Not only are the convulsions identical with those in epileptic man, but there is also loss of consciousness, a state of torpor, stupidity, and even in some cases something like insanity.

It happens that such animals recover spontaneously, and in so doing all of the phenomena described above occur in a reverse order, and the zone of skin regains its lost functions. When the epilepsy is due to the destruction of the sciatic nerve, the foot of that side loses the two outer toes, so that the animal has only one toe, the inner. When young are born to such a parent or parents (for it matters not whether one or both of the parents have been operated upon), they have this peculiarity of having only one toe on the posterior foot. Sometimes, however, they have additional toes, which in this case are attached by a pedicle to the limb.

Now all of those peculiarities which have been observed in the parents, all things in all their details, are witnessed also in the Guinea-pigs, hereditarily born toeless, who have developed epileptic phenomena. There is, therefore, an inheritance of a power to develop the disease, but no inheritance of the disease itself. Dr. Dupuy has examined the sciatic nerve of such animals and found them healthy, before, during, and after the existence of the disease. He has also followed these experiments through five generations. Dr. Dupuy made allusion to the doctrine of Balbiani on embryogeny, and thought that, according to Balbiani's laws, the phenomena of inheritance, in the case of epilepsy, could be explained, epilepsy being a malady of nutrition like all other nervous diseases. Dr. Dupuy stated that only those young which are born with alteration in the normal nutrition of parts become epileptic; in such the disease fatally occurs.

Dr. Jewell inquired whether the animals operated upon invariably transmitted their deformities.

Dr. Dupuy: No, not invariably, but it is so sometimes.

Dr. Hammond remarked that he had been astonished at the small proportion of transmitted cases of epilepsy in the human species.

Dr. Loring inquired if, in following out five generations, those two toes were absent, or whether the tendency was towards the normal. He made allusion to the non-transmission of the deformity of the feet, in the case of the Chinese women, and to the inheritance of diseases of the eye.

Dr. Dupuy stated that the tendency was, of course, towards the normal number of toes, since so small a number of the young have the deformity; that it appears, to have a lesion transmitted, it must cause an alteration in nutrition. He made reference to a paper which he had published, in which he had shown that the phenomena following a lesion of the sympathetic nerve, or corpora restiformia, in the Guinea-pig, are invariably inherited by their young, and it is known that these lesions modify the organs of sight. In regard to the Chinese, he did not think there was much reliable information.

Dr. Seguin remarked that the power to resist these hereditary influences was greater in the human subject than in the lower animals.

Dr. Jewell said that there was no deformity transmitted except where some of the parts have been removed; that a distinction should be made between those changes which are morphological and those which are structural.

Dr. Spitzka stated that he had read in Obersteiner's Essay that those animals which are most likely to become epileptic are

those which resemble their parents in color of hair; that the experiments of Westphal led to the view that epilepsy depended upon hæmorrhage in the medulla oblongata. Dr. Spitzka said he did not admit that the cell of Balbiani was considered as more important than the cell of Purkinje.

Dr. Dupuy remarked that all biologists accepted the views of Balbiani; and moreover, that it taught that Balbiani's cell and Purkinje's cell are two different things. The first carries ancestral, and the second maternal tendencies.

Dr. J. C. Shaw, of Brooklyn, exhibited a very interesting case of **Locomotor Ataxia** in a female child four years of age. When eighteen months old she had measles and scarlatina, and in a few months afterwards she began to experience difficulty in walking, followed by an inability to hold things in her hands. This difficulty increased until she was unable to walk. She now presents marked ataxic movements in both of the upper and lower extremities. When the child was supported, and she attempted to walk, both of the lower extremities were jerked forward and outward and the heel brought down first, in a truly ataxic manner. There did not appear to be any anæsthesia. It had been observed that at times the child would scream out without apparent cause. On May 2, 1877, she screamed out suddenly, and said that she had a pain in her left heel. She has no muscular atrophy or paralysis, and the muscles react normally to Faradization.

The diagnosis was made by exclusion, and he advanced an argument to show that it was a case of sclerosis of the spinal cord—desseminated, perhaps, and located in the lumbar part of the cord, and in the posterior columns.

The next was a paper read by Dr. William A. Hammond, of New York, which was, as Dr. Jewell afterwards remarked, interesting from a scientific as well as a theological point of view. The title of the paper was **The Odor of the Human Body as Developed by Certain Affections of the Nervous System.** Dr. Hammond called attention to some facts in regard to the natural odor of the body in the human species, and of the faculty which some of the lower animals possessed—that of differentiating between the odors of different individuals. Besides the inherent odor of the body, there was reason for believing that an entirely different one may be given off, not only as a consequence of disease, but as a result of emotional disturbance. During the middle ages, manifestations of the kind in question were not uncommon in the the persons of both sexes, and were attributed to miraculous power. That such cases existed was probable—not, however, as a special gift of God, but as a neurosis similar to other instances which had come under the Doctor's own observation. Cases were

then cited of a number of the more important instances among the saints, who were considered highly odoriferous. So far as the author of the paper was aware, there had been no attention given to the subject in the relations now under notice. The cases cited by Dr. Hammond as bearing upon this point were briefly as follows:

A young married lady of strong hysterical tendencies, from whom, during a paroxysm, an agreeable odor, similar to that of violets, was exhaled only from the left lateral half of the anterior wall of the chest. At such times the perspiration was remarkably increased in this region, as compared with the corresponding part opposite. The odor was perceptible at a distance of several feet, but was entirely absent during the intervals of the paroxysms. From an examination of an alcoholic extract of the odoriferous perspiration exhaled by this patient, it was presumed that the odor was due to the presence of butyric ether. The local application of several remedies to the parts, among which were preparations of carbolic acid, soap and water and other alkaline substances, gave the patient only temporary relief from the odor; but the internal administration of the salicylate of soda, in doses of five grains, entirely cured this lady of her violaceous odor, and the perspiration of the region was reduced to the normal character.

A second case was that of a young lady in whom the first exhibition of the odor (in this case that of pine-apple) occurred contemporaneously with an attack of chorea.

In a third case a pine-apple odor was emitted from the skin of the head, neck and chest of a woman whenever she was angry.

A fourth case was that of a man who, during frequent hypochondrical periods, emitted a violaceous odor. Occasionally cases were met with from whom a disagreeable odor was exhaled during sexual excitement. No opinion as to the actual and immediate cause of these odorous emanations was expressed, further than that they were due to a nervous disturbance.

Dr. Hammond passed around a small vial containing an alcoholic extract of the odoriferous perspiration of his first patient, which had a distinct violet smell; also a second vial of the same extract, with the addition of bicarbonate of soda, smelling strongly of pine-apple.

The paper was discussed by Drs. Jewell, Beard, Hammond, Seguin, Hamilton, and Spitzka, cases of a similar nature to those mentioned in Dr. Hammond's paper being cited.

Dr. George M. Beard, of New York, read a paper on **The Endemic Tetanus of Eastern Long Island.** That tetanus had been more frequent in portions of Suffolk county, Long Island, than

in other parts of the country was well known. Dr. Beard had passed several of his summers there, had conversed with a number of the physicians and residents, and corresponded with nearly all of the physicians of the county, asking for facts, and not opinions. Dr. Beards' conclusions up to statement are as follows:

1. For the last three-quarters of a century there has been an endemic tetanus in certain portions of Suffolk county. It consists of both the traumatic and spontaneous varieties, and affects animals as well as man.

2. This endemic abounds mostly in the towns of the south side, especially at the Hamptoms; is less common in the central towns and on the north side, and in Montauk does not exist.

3. The endemic has been on the decline for the past ten or fifteen years, and in the central portion (excepting Riverhead) no longer exists.

For the causation there are three conceivable theories: geology, the use of fish on the land as manure, and dampness in the air. The theory based upon geology and advocated by Dr. B. D. Carpenter, who has studied the subject, appears to be disproved by the decline in recent years. Geology is a constant factor. In favor of the fish-on-the-land theory is the occurrence of the disease in those localities where fish are most used and the decline of the disease with the decline in the use of fresh fish as a manure. Dr. Beard thinks, however, that the facts up to date seem to favor the theory of dampness in the air combined with the local dampness of the soil.

Dr. Beard would treat a case of tetanus by calabar bean (English preparation), in small doses every hour or half-hour, so as to affect the pupil, and at the same time apply ice-bags to the spine. As suggested by Dr. Carpenter, the patient should be kept absolutely quiet, if possible. The local application of the oil of turpentine to all wounds is practised by a number of the physicians of Suffolk county, and is to be recommended. The apprehension felt by New York surgeons that tetanus is likely to follow surgical operations in Suffolk county is not justified by the facts as they now stand.

Evening.—Dr. A. D. Rockwell read the history of a remarkable case of **Intermittent Hemiplegia.** A stair-builder, aged forty-nine, in fair health, was seized one afternoon in July with dizziness, loss of speech, and complete paralysis of the left side, which lasted for twenty minutes, and then entirely disappeared. Similar attacks occurred every other day for three weeks thereafter, at about the same time of the day. One day, about the middle of August, he had a much severer attack at 11 A. M.,

which was repeated every day at the same hour until September 3d, and between 11 A. M., and 4 P. M. each day; during all this time paroxysms recurred three or four times. In the more severe attacks he was unable to walk or speak, but during the milder ones he could move with difficulty and speak indistinctly. Dr. Rockwell's treatment consisted of a mild *séance* of general faradization, in conjunction with three two-grain doses of quinine daily. There was decided improvement at once, and on the 25th of September he was discharged as apparently cured. He remained so until December 4th, at which time the paroxysms re-occurred and in a more violent form, and he died on the following day.

Post-mortem examination showed congestion of the surface of the brain; pia mater covered with a thin film of organized lymph from old inflammations; texture of the brain softer than normal; choroid plexus enlarged and cystic; basilar artery and part of the circle of Willis enlarged and atheromatous; mitral valves and liver in a condition of fatty degeneration; serous effusion at the base of the brain, but there were no arteries ruptured, no evidences of embolism or thrombosis.

As the above described pathological changes seemed hardly sufficient to account for the unusual symptoms and suddenness of death, Dr. Rockwell discussed at some length the probable cause of the final result, and, by means of exclusion, thought it probable that death was due to a spasm of the vessels in the brain tissue, which rendered it unfit to discharge its proper function.

Dr. Hammond cited a case in his own practice which he considered analagous with Dr. Rockwell's case. Cases were also cited by Drs. Beard, Kinnicutt, and Jewell.

Dr. V. B. Gibney, of New York, read a paper entitled **Spinal Irritation in Children.** The paper consisted of the clinical histories, together with remarks upon a number of cases which Dr. Gibney was wont to consider as cases of spinal irritation.

In the course of the lengthy and animated discussion which followed, it was made evident that there was some difference of opinion as to what spinal irritation really was, several of the members of the Association having expressed their disagreement with Dr. Gibney on this point. The question of local mal-nutrition was raised and freely discussed.

Dr. E. C. Seguin read a paper entitled **A Clinical Contribution to the Study of Post-Hemiplegic Chorea.** He related the history of two cases. In the first, observed in 1877, a young man of eighteen years suddenly became paralyzed in the left arm, without disorder of sensation. Later, some numbness appeared in the left hand, and in about two months convulsive movements

manifested themselves in the left upper extremity. About this time the left leg became affected with weakness and tremor; later still, the lower part of the left side of face twitched. The arm and leg were the seat of convulsive movements of choreiform type, made worse by emotion or attempt to use parts; no ataxia; sensibility slightly lessened in hand. Later there occurred palsy of third cerebral nerve on the right side; palsy and spasm in left face. Patient died, but autopsy could not be obtained.

Case second was presented to the Association. Its history was briefly this: Male, age twenty-six years; in April, 1876, sudden right hemiplegia, with partial loss of consciousness and temporary aphasia. During second and third months convulsive movements appeared in the right arm and hand, while great recovery of muscular power was obtained. Partial right temporal hemiopia. Numbness and slight anæsthesia in face, arm, and leg on right side. A few epileptiform attacks since. Seven years ago had chancres, followed by doubtful secondary symptoms. Movements on right side are now nearly normal in force; while at perfect rest slight oscillations (of paralysis agitans type) occurred in fingers and hand. During attempts to use the hand, violent incoördinate movements occur, irregular extension and flexion, of quasi-choreic, quasi-ataxiform type. Partial right hemiopia and hemianæsthesia.

In both these cases, the movements, first described by Dr. S. Weir Mitchell, are present: and from the other symptoms present it would appear as if the lesion in these cases had been in the basal part of the hemisphere, just below and posterior to the thalamus opticus, involving, to a certain extent, the internal capsule. In the first case the lesion extended downwards so as to involve the crus or the origin of the third nerve.

June 8th.—The Committee on Nominations presented the following report, through Dr. Miles, its chairman:

For President—Dr. J. S. Jewell, of Chicago; *Vice-Presidents*—Dr. F. T. Miles, of Baltimore, and Dr. S. W. Weber, of Boston; *Corresponding Secretary*—Dr. J. J. Mason, of New York; *Recording Secretary and Treasurer*—Dr. E C. Seguin, of New York; *Curator*—Dr. T. A. McBride, of New York. On motion, the report of the committee was accepted, and the gentlemen named duly elected officers of the Association for the ensuing year.

Under the head of Miscellaneous Business, the President read a letter from Dr. William A. Hammond, offering to the American Neurological Association a prize of two hundred and fifty dollars to be awarded at its next annual session on the favorable report of a committee of three of its members, to the author of the best

essay on the anatomical and physiological effects of strychnia on the brain, spinal cord, and the nerves.

The following is the Committee on Prize Essay: Dr. S. Weir Mitchell, of Philadelphia; Dr. J. S. Jewell, of Chicago, and Dr. E. C. Seguin, of New York.

Dr. J. C. Shaw read a paper entitled **A Contribution to the Symptomatology of Brain Tumor.** Given in brief the two cases cited were as follows:

A lady, aged fifty; "choked disk" both eyes; dizziness, headache, attack of falling, without convulsions general or local; no paralysis. Post-mortem examination revealed a sarcomatous tumor in the right temporal fossa, pressing upon the inferior and middle frontal convolutions.

W. P., aged twenty-nine; male; "choked disk;" attacks of falling without loss of consciousness; no paralysis, choked disk lasting three and a half years without passing to atrophy; vision $\frac{20}{40}$. Post-mortem—Pedunculated cystic tumor pressing on the anterior surface of the left temporo-sphenoidal lobe. This man was one of the victims of the fire in the Brooklyn Theatre.

Dr. Eugene Dupuy made a communication on **Vaso-Motor Centres,** which was to the effect that vaso-motor centres are not to be looked for in the spinal cord or brain, but outside of them. The vaso-motor centres are made up of the ganglionic system and of exceedingly numerous ganglionic cells, that are to be found scattered in the pia mater in the neighborhood of the medulla oblongata and the pons; also in the pia mater of the anterior parietal portion of the brain; also from ganglia that are found on the track of the ganglia of the trigemini. and the ganglia of the spinal and cerebral nerves; also from the ganglia that are scattered through the cranial and other viscera.

That vaso-motor fibres only become connected with the cerebro-spinal system at their apparent origin, that is to say, at that point where the nerves get there sheath of pia mater after leaving their centres.

Localized Lesions of the Brain.—Dr. E. C. Seguin read a report of seven cases in which more or less limited lesions of the cerebral cortex has been connected in life with definite symptoms. The cases were grouped in three catagories.

First.—Cases in which a limited lesion produced aphasia with or without hemiplegia. In Case I, ramollissement of the convolutions, in front of and just behind the fissure of Rolando on the left side, produced right hemiplegia and complete aphasia. Much recovery of motion occurred; aphasia remained complete. Careful examination of the brain showed that the posterior part of the third frontal convolution and the folds of the island of Reil

were involved in the lesion. In Cases II, embolism of the first part of the left middle cerebral artery produced right hemiplegia with complete aphasia. There was ramollissement of the superficial part of the left third frontal convolution and of the first two folds of the island of Keil and their subjacent white matter. In Case III, chronic aphasia of varying degree, epileptic attacks, and partial temporary right hemiplegia were found to have been caused by a chronic pachymeningitis adherent to the altered left third frontal convolution near the fissure of Sylvius. Death in status epilepticus, with complete right hemiplegia, caused by extensive central softening of left hemisphere; very recent compared with meningitis. In Case IV, a secondary (by infection) tubercular meningitis, with its focus about the left middle cerebral artery and over the third frontal convolution and the folds of the island of Reil, produced intermittent aphasia (occurring almost every forty-eight hours), and at the close of life, in twelve days, there was complete aphasia and right hemiplegia.

Second.—Cases in which a limited lesion produced paralysis. Case V: Small patch of softening in the middle of the left ascending frontal convolution, reaching inward to roof of ventricles, produced a right hemiplegia without aphasia, and probably without facial palsy. When examined, had palsy of right arm, none of face or tongue, and was paraplegic (from spinal lesion found in cervical region).

Third.—Cases in which a limited lesion gave rise to limited convolutions. Case VI: A young man, injured on to of head, developed common epilepsy, replaced by local epileptiform spasms in left face, neck, hand, and arm; paresis of these parts. Later, left hemiplegia and return of general spasms. Autopsy showed injured skull, thickened bone, adherent thickened bony dura over upper (inner) end of left ascending and first frontal convolutions, a sarcomatous tumor, starting from adherent dura and penetrating into nearly whole of upper half of right hemisphere. Case VII: Septicæmia, suppurative meningitis, and two abscesses in cortex of brain. One as large as a large almond in lower part of left second frontal convolution, not involving more than anterior margin of the third, gave rise to no symptoms. The second, about the size of a pea, situated in the white matter just under the cortex of the middle part of the right second parietal convolution, was in all probability the cause of very singular epileptiform (no loss of consciousness) spasm, which occurred early in the disease, in the left hand, arm, and face.

These cases seem to favor recent views on the localization of function in the cerebral cortex. The first group emphatically support Broca's hypothesis of a speech centre in the left third

frontal convolution, and the anterior folds of the island of Reil. The cases of the third category also give support to Hitzig and Ferrier's views. The author is not prepared to accept so fine a localization as proposed by these gentlemen, but it seems to him that we are now in a position to speak of excitable and non-excitable regions in the cortex (pathologically speaking).

Evening Meeting.—The Association was called to order at 8 P. M. On motion of Dr. G. M. Beard, it was resolved to hold the next annual session of the Association in the city of New York.

Dr. Eugene Dupuy made a few remarks upon **Hereditary Transmission of Peculiarities.** It was a report of a curious case of heredity. Dr. Dupuy stated that he owed to his friend, Dr. Gibney, the opportunity of observing a family consisting of father and mother, five children, and one grandchild. The father and mother are semi-ambidextrous. All of the children and the grandchild are ambidextrous to an annoying degree: all of the movements which they perform with one hand are simultaneously performed by the other hand. The girls are obliged to use only one hand when dressing themselves, or when cutting patterns, and hold the other hand down by their side, because the two hands perform the same movements at the same time, and would interfere with each other.

Attention was called to the fact that the father of the grandchild is not semi-ambidextrous. Dr. Dupuy has made experiments upon these persons, and has found that if the skin of the forearm on one side be kept well dry, and a rapidly interrupted electrical current be used, so as only to call forth reflex actions, it is possible to induce synchronous movements in the fingers of both hands, and also muscular contraction in the lumbricales muscles of the fingers, which are two rapid to be carried on by the will. Dr. Dupuy considered these facts of great interest when coupled with the facts which he reported yesterday about hereditary epilepsy.

Mental Therapeutics in Organic Disease, as Illustrated during the Blue-Glass Delusion.—This was the title of a paper read by Dr. George M. Beard, and was a continuation of one which he read last year before the Association, on "The Influence of Mind in the Causation and Cure of Disease."

Dr. Beard cited two cases of organic disease of the spine which had received decided temporary relief while sitting under blue glass. The opinion was expressed that in time all works on therapeutics must include a chapter on mental therapeutics.

From experiments and study, Dr. Beard was able to make the following psychological suggestions:

1. The ill-success of patients treating themselves, and of physicians treating their own families, was partly due to the want of awe and the emotion of wonder to co-operate with them.

2. The old custom of keeping patients ignorant of the contents of prescriptions, by writing them in Latin, had psychology on its side. Possibly we may be going too far the other way.

3. It is entirely possible that hydrophobia and tetanus may be brought on, with all their distinctive symptoms, and that death may result through the emotions of fear and expectation alone.

4. Patients whose will and intellect are feeble have a bad prognosis, for with them the subjective symptoms are trifling; and *vice versa.*

5. Physicians of great scientific attainment and real worth may fail when an ignorant and obscure charlatan succeeds, because in the latter wonder and awe are excited, and those are more powerful therapeutics than simple respect.

6. In experimenting in hospitals with new medicines, patients must be deceived, or else the results are complicated by mental influence.

It being very late, Dr. Jewell's paper on **Athetosis** was read by title only. The Association then adjourned.—*New York Medical Record*, July 21, 1877.

Editorial.

The Reply of Drs. Peaslee, Emmet and Thomas to Dr. J. Marion Sims' pamphlet, entitled "The Woman's Hospital in 1874," is an unfortunate publication for them. As was shown in our June number, this controversy was an altogether avoidable one, so far as attacking any publication made or permitted by Dr. Sims was concerned. But now both sides have been heard, and the case is submitted to the profession as to a jury.

Much space is lost in the pamphlets of both parties by referring to matters of trifling importance. As it is of no interest to refer to these things in detail, we shall at once take up what Drs. P., E., and T. regard as "*the most malicious of Dr. Sims' charges.*" "It is," as expressed by these "former colleagues" of Dr. Sims, "that his treacherous brethren of the Medical Board, while ostensibly feeling for him a friendly sympathy, insidiously furnished a member of the Board of Governors (Col. Davis) with statistics of operations which misrepresented him." The "former colleagues" simply record their "indignant denial

of this foul aspersion, and *leave it to Col. Davis himself,*" to help them out of the trouble.

This Col. Davis—brevetted *Governor*—has a reputation so local that we had to write to several prominent residents of his own city before we could find out who he was. It is a sad commentary upon eminent greatness that the world-wide fame of Dr. Sims may be injured by such a man as "Col. Davis,"—himself unknown—who introduced a resolution at a meeting of the Board of Governors "which provided for his *removal*" from the Medical Board of the Woman's Hospital. The idea that this Col. Davis, whose brevet title of "Governor" is in reality due to Dr. Sims, should prefer charges of "*gross insubordination*" against the ruling gynæcologist of the world, without whose influence and indomitable energy and perseverance the Woman's Hospital would scarcely have existed! This "one of the Governors" sitting in judgment upon Dr. Sims' professional record—ridiculous picture! Surely he must be in quest of some *notoriety!*

When it is fully understood that Dr. Sims was the founder of the Woman's Hospital; that his connection with it gave it the enviable reputation and support it enjoyed; that the whole organization was planned by him; that by associating other medical men of ability with him in the medical management of the Hospital, he has given to them a position and a growing influence they would not probably otherwise have had—in short, when it is remembered that the whole thing was the child of Dr. Sims' conception and rearing, popular sentiment and a sense of common justice suggest that Dr. Sims should have been allowed a controlling voice in the management of the affairs—especially the medical affairs—of the Institution. If *Governor* Davis' knowledge of customary courtesy had been sufficient, and if his views could not conscientiously be made to conform with Dr. Sims' wishes, duty to him who gave him the title of "brevet *Governor*," and to the true interests of the Hospital, would have led him to resign rather than to seek Dr. Sims' removal. It must be "a lost cause" which suggested to Drs. P., E. and T. the possibility of their being able to rally behind so forlorn a hope.

As an evidence of the rashness of this belligerent Col. Davis—piqued and maddened as he was by Dr. Sims' evident contempt for his authority as "one of the Governors"—he comes forward "*without solicitation*," and displays a wonderful *cacoethes scribendi*. Like all over-willing witnesses, he tells too much. Notwithstanding "Dr. Barker had been called upon by some personal friends of Dr. Sims to decline the nomination *made by the Medical Board*, in order that Dr. Sims might be re-elected to fill his own vacancy," this "Governor" Davis *officially* applied

to Drs. Thomas and Emmet "*for the information he desired*," and he got the statistics, which Dr. Sims says misrepresented him, and which Drs. P. E., and T. themselves admit were "*entirely erroneous*," but which satisfied the desires of this "Governor." Col. Davis had been "advised that * * * some members of the Board [of Governors] * * * would oppose the vacancy being filled by any medical gentleman other than Dr. Sims himself." Hence it was that he provided himself "officially" with statistics *before the January*, 1875, *meeting* of the Board, and for what purpose? Simply that they might be brought "for the *first time*" "to the notice or knowledge of the Board of Governors" "*while the nomination of Dr. Barker was under consideration*," when it was also probable that the friends of Dr. Sims desired to re-elect him "to fill his own vacancy." What language can depict in proper terms such an unfair act? Here were the friends of Dr. Sims suddenly confronted by an *official* report of statistics which, of course, at once placed them *hors de combat*, but which statistics Drs. P., E. and T. now acknowledge were "*entirely erroneous*." What manly, generous, or noble purpose this Col. Davis could have had in view in displaying "for the *first time*" these false statistics—especially false as to Dr. Sims' record—at this particular meeting of the Board of Governors, is beyond the power of imagination to conceive. Was there aught else than a malicious purpose in his heart to avail himself of this favorable occasion to mar the record, and to impair confidence in the skill and learning of this most gifted of all gynæcologists—Dr. Sims? And when we remember, with all of this, that he had "this end in view"—preventing the re-election of Dr. Sims, by securing the election of Dr. Barker—as he himself virtually declares (on page 10 of the pamphlet of the former colleagues), is it not evident that any testimony on the subject from "brevet Governor" Davis is prejudiced, and as such worthless? It would have been far better for these "former colleagues" simply to have recorded their "indignant denial of this foul aspersion," than to have left "it to Col. Davis himself to state the facts."

But Drs. P., E. and T. affirm that these "entirely erroneous" "statistics were neither prepared nor presented by the Medical Board" (p. 12). We simply ask the question, how does this statement compare with the sentence in the letter of Col. Davis, to whom they leave it "*to state the facts*," which statement (p. 10 of pamphlet of Drs. P., E. and T.) reads: "I applied in my official capacity, as one of the Governors, to *both* Dr. Thomas, as the Secretary, and to Dr. Emmet, as the Chairman of the Medical Board, for the information I desired." "This information

[which Col. Davis received] * * * * embraced *nothing* but a compilation of facts from the records of the Hospital, *and which record was in the custody or under the control of the Medical Board, and which* [Board] *was alone responsible for the accuracy of its contents?*" We will not press this question further than to remark that there is "confusion" somewhere in this "Reply."

It is due, however, to these "former colleagues" to say for them that they affirm in reference to these unlucky and "entirely erroneous" statistics that "The Medical Board, neither collectively nor individually, ever examined the reports obtained [officially] by Mr. Davis until some time after he had used them." This concession is a little unfortunate for the "former colleagues," since they assert (page 15) that some of them "were at that very time, to their own detriment, endeavoring as individuals to prevent the acceptance of his [Dr. Sims] resignation." It is difficult to reconcile such obtuseness as being a part of the character of great scientific men; and yet the fact stares us in the face. Did they not know that Col. Davis was bitterly opposed to Dr. Sims' remaining as one of the Medical Board? Did they have no suspicion or idea as to what use this "brevet Governor" wished to make of the official information he sought, should such information be such as he "desired?" Was no suggestion awakened in their minds by the fact that these statistics were to be brought "for the *first time*" "to the notice or knowledge of the Board of Governors" "while the nomination of Dr. Barker was under consideration," and when it was possible that Dr. Sims might have been re-elected? Under such circumstances as these, does it not appear that *friends*, unless they had been exceedingly obtuse, would carefully have examined the official reports before sending them in? Was it not culpable neglect, or else an absence of friendship for Dr. Sims that not one of the Medical Board examined the statistics, and even have added an explanatory note had it been necessary? But it was not "*until some time after*" Col. Davis had used the statistics that the Medical Board, either collectively or individually, examined the reports; and "*then* they found them to be incorrect!"

But this, unhappily, is not all, nor even the worst part of this unfortunate "Reply." These "former colleagues" affirm (page 15 of their pamphlet) that they never gave the least foundation for the statement that Dr. Sims' "associates were opposed to him, or desired the Governors to accept his resignation." They declare, on the contrary, that they were, "to their own detriment, endeavoring, as individuals, to prevent the acceptance of his resignation." And yet, in face of this declaration, Drs. P.,

E. and T. admit as evidence in their favor that oft-referred to letter of Col. Davis, which contains (page 11) the following sentence: "I was never approached in a single instance by either one of you upon the subject; nor was there even an interview held by me with either of you except upon my own voluntary motion, and only *then* in my official capacity." If, then, this letter of "brevet Governor" Davis is worth anything at all—if they leave it to him "*to state the facts*"—it shows that this important personage—this prime instigator of trouble in the Board of Governors—this man who introduced a resolution "which provided for Dr. Sims' removal," was never, in any way, approached either individually or collectively by any member of the Medical Board! This statement "*of facts*" certainly looks bad on paper.

But we have neither the space nor disposition to point out more of the many other incongruities and inconsistencies of this unfortunate "Reply" of Drs. Peaslee, Emmet and Thomas to the pamphlet of Dr. Sims. We have said enough to show that there was no occasion for the original circular attack upon Dr. Sims (published in the June number of the *New York Medical Journal*); that there was no ground for the charge against him of making statements "unqualifiedly false;" that in their pamphlet "Reply" they have introduced evidence that is worse than worthless to them; and that portions of this "Reply" itself are self-contradictory, even if the evidence which the "former colleagues" admit be accepted; that these "former colleagues" did not stand by Dr. Sims as friends in a common cause should have stood shoulder to shoulder; and that, if they did not "insidiously" do so, they did, at least, *officially* furnish "a member of the Board of Governors (Col. Davis) with statistics of operations which misrepresented him," and which "official," though "entirely erroneous" statistics used by Col. Davis *while the nomination of Dr. Barker was under consideration* probably had more effect in preventing the re-election of Dr. Sims than if they had been known to be "insidiously" introduced. It is the voice of the profession—the jurors in the case—that they and the Board of Governors have wronged Dr. Sims, and irreparably damaged the Institution which was recently the pride of the American profession.

Though Dr. Sims' wrongs have been grievous and hard to bear, he does not look for, nor has he a right to expect, the medical press to take them up and fight for him as an individual. The wrong done by the Medical Board and the Governors is to the dignity and justice of the whole American profession, and to the cause of medical science, and as such we speak of the affair.

Dr. Thomas is the author of a work on *Diseases of Women* that has no equal in any tongue. Dr. Peaslee's work on *Ovariotomy* has become a standard authority wherever it has been introduced. Dr. Emmet has contributed to medical journal literature, articles of the most sterling value connected with his specialty. Such men as these have no right to bring discredit on the profession. They should be more watchful than lesser men in guarding the claims the profession has upon them. And when they glaringly and deliberately err, they must expect the unsparing condemnation of the medical press and the medical public. If they show no charity towards a brother practitioner who falls in fighting the battle of the profession against the non-professional usurpation of power over the rights and privileges of medical men, they must expect no sympathy. If the profession honors these men of eminence, they are at least expected to stand up at all times for the honor of the profession. And when the Board of Governors, through the ignorance or malice of one man—"dressed in a little brief authority,"—wrongs, not only Dr. Sims, but the whole profession, as also right and justice, without a single official protest from the Medical Board, then it is time for the medical press to step to the front.

The only possible hope that we can see of restoring the usefulness of this Woman's Hospital to the general profession, and of renewing confidence in its management rests in the suggestion that everybody at present connected with the Institution should at once resign, and let there be a thorough reorganization.

The Engravings and Biographical Sketches of Distinguished Medical Men, which we are publishing from time to time, are receiving the almost universal commendation of our subscribers.

In January, we presented our readers with the engraving and sketch of Dr. J. Marion Sims.

In our May number, besides the engraving and sketch of Horace Wells, with whose life, however, many of our readers were no doubt partially familiar because of former publications, we presented for the first time on record a sketch and engraving of one whose great discovery of anæsthesia will make his name illustrious in history and beloved by generations to come—Dr. Crawford W. Long, of Athens, Ga. As conclusive as is the proof (stated by Dr. Sims in our May and June numbers) that Dr. Long was the true discoverer of anæsthesia, so unfortunately modest and retiring was he that he was apparently willing to let others have the credit, instead of asserting his just claims so long and so loudly as to force the world to accord to him the honor which is justly his own, and which will hereafter be conceded to him.

Our October number will contain the engraving and sketch of Dr. Hunter McGuire, of this city, formerly Medical Director of

"Stonewall" Jackson's (Confederate States) Army Corps, President of the Association of Medical Officers of the Confederate States Army and Navy, etc. Being the most eminent of surgeons practising in the South at this time, and having a rapidly growing national and foreign reputation, we feel assured that this publication in our October number will be generally acceptable.

The engraving and sketch of the world-renowned surgeon, Dr. Lewis A. Sayre, of New York, will appear in either our December number, 1877, or January number, 1878. The numerous contributions which Dr. Sayre has made to surgical science and art, and his immense popularity throughout the country, will make this publication of peculiar interest.

We shall continue to use every effort to make this "new feature" of interest to our subscribers.

Dr. Robert Battey's Engraving, &c.—We are glad to announce that sometime during the Spring of 1878, probably in the April number, we shall present a steel-plate engraving and biographical sketch of Dr. Robert Battey, of Rome, Ga. We are sure that we shall receive the thanks of our readers generally for thus bringing before them this distinguished gynæcologist, whose bold suggestions and masterly operations have made a new page in medical history. As the biographer, we shall have the services of one whose professional standing will be a guarantee of prudence and truthfulness.

Burrington's Wadsworth's Uterine Elevator is again advertised in our pages. Having had occasion some time ago to use one of these instruments in the case of a lady who was suffering with prolapsus uteri in the second degree, we were highly pleased with the result. It was a case requiring the use of a stem-pessary. We would suggest to any of our friends who has an obstinate case of the kind referred to, to try one of these "uterine elevators." The proper use of the instrument does not interfere with local applications to the cervix; on the contrary, the cup assists in holding medicated cotton wool, etc., in position.

Fairbanks' Fountain Syringe is another new advertisement. The principle upon which the instrument advertised acts is exceedingly simple, and the syringe itself is useful in every family. They are far less troublesome than the Davidson or Matteson syringe or modifications of either of these, and require no loss of muscular strength to work them.

Correction.—We give this letter place with pleasure:

NEW YORK, July 18, 1877.

My Dear Doctor,—In your journal for July, p. 296, you report that in the Surgical Section of the American Medical Association, at Chicago, "Dr. Sayre said the resolution adopted Tuesday," &c., &c. As Chairman of that Section, I am prepared to say that Dr. Sayre made no such remarks as are there reported, and made no "protest." Dr. Owen, the Secretary, confirms this statement. How did you get your information as to the matter? [From the *N. Y. Medical Record*.—EDITOR.] The fact is, Dr. Sayre made no allusion to the subject of shortening of the limbs in the case of fractures of the long bones during the meeting of the Section, either on this day or on any other day. Very truly yours,

FRANK H. HAMILTON.

Hygeia Hotel, Old Point Comfort, Va.—We enjoyed a hurried trip to this delightful sea-side health resort a few days ago. It is a charming sanitarium, an excellent place for the sick, and the pleasure-seeker cannot find a better place anywhere. In partial proof of these statements, the following preamble and resolutions were unanimously adopted at a meeting of the passengers on one of the James River steamers returning from Old Point, on July 10th:

WHEREAS, After a short sojourn at that pleasant retreat (Old Point Comfort), it seems meet to testify our appreciation of the great benefit resulting therefrom, and to invite the attention of our Virginia people, as well as those of sister States, to this particular place as worthy of their patronage,

Resolved, That this meeting, extemporized on board the steamer Eliza Hancox, appreciating the advantages of Old Point Comfort, both as a resort of pleasure and health, do most cordially commend it to the pleasure and health-seeking of our own and other communities.

That we are under a lively sense of the kind care and polite attention of the proprietor, Mr. Phoebus, and his accomplished assistants, and do most confidently assert that nothing was lacking in the accommodations received during our sojourn under his sea-side roof.

Obituary Record.

Dr. A. G. McChesney.—At a special meeting of the Kanawha Medical Society held at the office of Dr. Cornstock on May 23, 1877, Dr. Spicer Patrick, in the chair, the following resolutions were unanimously adopted:

Whereas, It has pleased Almighty God to remove, by death, our late friend and professional associate, Dr. A. G. McChesney,

Resolved, That we regard this dispensation with the deepest sorrow, and will ever deplore the removal of one so useful and honored in the prime of life and in the midst of a successful and bright career.

Resolved, That we entertain a high sense of his ability, his integrity and untiring industry in his profession.

Resolved, That we cherish his memory as a good man, emulating his virtues as a citizen, friend and christian.

Resolved, That we deeply sympathize with his family in their irreparable bereavement.

Resolved, That copies of these resolutions be sent to the family of the deceased, and to our city papers, the *Virginia Medical Monthly*, and the *Richmond and Louisville Medical Journal.*

W. P. EWING, M. D., J. S. COTTON, M. D., A. E. SUMMERS, M. D., Committee. LAWRENCE CARR, M. D., Sec.

Charleston, West Va.

Dr. Nathan Ryno Smith, of Baltimore, died July 3d, 1877. He was born in the town of Cornish, N. H., May 21, 1797. "During the half century which has just passed, no one has occupied so distinguished a position in his profession and in affections of a community as has Professor Smith, or has labored more diligently and successfully in the cause of science."—*Md. Med. Jour.*, Aug., 1877.

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ART. I.—*Report of a Case of Extra-Uterine Pregnancy—Abdominal Variety.* By JAS. H. SOUTHALL, M. D., Little Rock, Ark. (Presented to the Arkansas State Medical Association, at its 7th annual session.)

Extra-uterine pregnancy—particularly the abdominal variety—has always been a subject of much interest to the profession, and it is likely to continue as such until something more definite is understood regarding its nature, causes and symptomatology. Much has been written in aid of the more thorough elucidation of the subject; yet much remains to be studied to make more apparent its multiple anomalous features. Recognizing, however, as I do, my want of information pertaining to the phenomenon, I am not disposed to make any remarks in attempted explanation of occurrences that so many others are better qualified to undertake. Hence, with a slight allusion to the causes of the accident, and a few comments upon certain symptoms said to be characteristic, I shall enter into the history of the case I wish to report.

Dr. John H. Parry, in his work on *Extra-Uterine Pregnancy*, which is based upon an analysis of five hundred cases, mentions a large number of the chief causes of the occurrence—although he precedes the enumeration with an acknowledgment of his inability to offer any solution as to how or why it should occur in many cases. He says: "In many instances, the causes of extra

uterine fœtation cannot be determined. A young woman becoming pregnant for the first time, immediately after marriage, or a matron already blessed with a numerous family, may be the victim of this distressing accident without one being able to discover any reason for it." According to Dr. Parry, the following are the chief causes, as developed by his analysis of 500 cases: Peri- and para-metritis, uterine displacements, hernia of some of the internal genital organs, tumors of the uterus and surrounding organs, an unhealed section of the uterus made in the operation of gastro-hysterotomy, moral and mental influences, twin conception, deranged physiological action of the Fallopian tubes—such as spasm, paralysis, etc.,—too great relaxation and inaction of muscular fibres of the canal, congenital narrowness of the oviduct, etc. But as none of these can be offered in explanation of the occurrence in the case I am about to report, I am led to think that there must certainly have been some physiological cause, apart from any pathological condition of the uterus or its appendages.

Two theories are held regarding the mechanism of the passage of the ova into the Fallopian tubes: one, the supposed grasping of the ovary by the fimbriated extremity of the Fallopian tubes at the time of rupture of the Graafian follicles; the other, that the ova are carried to the opening of the tubes upon the surface of the hilum, by the ciliary currents. The former of these views is regarded as most plausible when considering abdominal pregnancy; and such may be the explanation of the occurrence in this case. The ova, having been fecundated at the time of rupture of the ovisac within the ovary, may have escaped through failure of the fimbriated extremity of the Fallopian tubes to grasp completely the ovary, and thus permitted the fecundated ova to drop into the peritoneal cavity.

To condense the symptoms of extra-uterine pregnancy, we have, first, all those of normal gestation. Then, about the fourth or sixth week, according to Drs. Campbell, Rogers and Parry, a characteristic feature appears, viz., paroxysms of colicky pains on one side or the other, accompanied in many cases by a sanguinolent, clotty and shreddy discharge from the uterus. This last, when present, Dr. Rogers regards as almost pathognomonic.

In extenuation somewhat of my error in diagnosis of this case,

prior to the completion of the full period of normal gestation, I propose to make a few remarks concerning this characteristic pain. These colicky pains were experienced to a limited extent by my patient; yet they were not located by her on either side, but rather in the pubic and umbilical regions. Nor were they of that excruciating character which entitled them to a suspicion that they proceeded from any abnormal condition other than what might be referred to the uterus in a state of local congestion. But, to quote Dr. Parry: "The usual signs of this early period of gestation appear successively; or, indeed, she [the patient] may enjoy better health than she did during the same period of previous pregnancies, when suddenly and without any warning the unfortunate victim of this terrible accident is seized with a very characteristic symptom. This is a violent pain in the abdomen, usually called colic by the patient and her friends. The subject of the mishap suffers much from these pains for the first few months of her pregnancy." This symptom, excepting in the tubal variety, it seems to me, should be considered as questionably characteristic or diagnostic. We can readily see how, through the narrow and contracted limits of the Fallopian tubes, pain of a severe and characteristic nature might be experienced through the development of the ovum. And with a knowledge of its significance, notwithstanding there might be no sanguinolent discharge from the uterus as indicative of a threatened abortion or return of menstruation, we could probably appreciate the diagnostic value of the symptom. But, to consider this pain as *characteristic* of abdominal pregnancy, to me seems somewhat doubtful. When we consider the many and great changes occurring in pregnancy, whether it be uterine or extra uterine, in which irregularities of innervation, disturbances of the circulation, etc., are a constant concomitant, the characteristic feature of this symptom, as a whole, must become dubious in the extreme. The uterus, being an organ endowed with great nervous power and vascularity of structure, is to an extent the seat and centre of a higher degree of irritability under either form of pregnancy. Hence we may expect symptoms apparently singular, but not at variance with the laws of nature.

As it is a well-established fact, that in extra-uterine pregnancy the uterus undergoes changes similar to those of normal gestation—

in the formation of the decidua at the offset, in the increased volume and vascular condition of the organ, etc.,—it is a natural inference that the pains spoken off, except in tubal pregnancy, are to be accounted for by the peculiar exaltation of nervous and vascular tension wrought upon the pregnant woman through reflex nervous action. The law of sympathy is one of universal prevalence, and in the female the uterus may be truthfully said to be its centre. Hence pregnancy, whether uterine or extra uterine, must, to a greater or less degree, disturb or influence the whole female system. In the course of normal gestation we have all witnessed the severe and paroxysmal pains, and doubtless have been called upon, time and again, to afford relief, and that, too, during the first months of pregnancy. Indeed, irregular pains, cramps, etc., are treated of in all text-books as incidental to this period of utero-gestation.

The formation of this decidual membrane, it is claimed, is of short duration. It is also said these colicky pains only continue for the first few months, which is doubtless also a coincidence as to this characteristic symptom.

How are we, then, to contra-distinguish the pains occurring in normal gestation from those of extra-uterine—especially if there be no other symptoms or indications that would arouse suspicion of having a case of extra-uterine pregnancy to deal with? Or if there be no pains of any greater severity than those experienced by this patient? There are no fixed rules for so doing, nor causes alleged as certain to produce those of extra-uterine. Dr. Parry admits that the causes said to produce this symptom are involved in considerable uncertainty, and says, "that a recent writer attributes it to peritonitis." He, however, thinks "it appears probable that these paroxysms of colicky pain are produced by contraction of the fœtal cyst. These can occur in Fallopian gestation, and the absence of the symptom in certain cases of misplaced fœtation can be accounted for by the fact that there are no muscular fibres in the tissues surrounding the ovum." We admit that in Fallopian gestation, the surrounding tissues being muscular, the pressure of the fœtus by its growth and development does become an element in the production of this pain. But to suppose the contraction of the fœtal cyst a something devoid of muscular fibre, capable of yielding this characteristic

pain, seems to me to be about as plausible as to suppose the pains of normal gestation to be produced by the membranes enveloping the fœtus. Cazeau says, "these pains are not produced by contraction of the walls of the cyst, as many have stated, because, excepting the cases of tubal or interstitial pregnancy, they never contain any muscular fibres; *and hence we must search for the cause in the uterus itself.*" Whatever may be the cause of the pain, this symptom should have in it something distinctively characteristic. If it results, however, from sympathetic or reflex nerve action, excepting as is stated above, its peculiarity is lost in the many anomalous symptoms which might arise from such a centre. The mere fact of a woman afflicted with extra-uterine pregnancy denominating the pain colic, the character of which it may resemble, does not necessarily determine the nature of her pregnancy, nor should it occasion a suspicion that her gestation was not altogether normal, unless we start out upon the sea of diagnosis with the supposition, as a chart, that every woman suffering with a pain in her abdomen during the early months of her pregnancy is the victim of the accident.

As to the symptoms in the case to be now reported, I will state, that at no time, from the cessation of her menses until the completion of the period of normal gestation, was there any sanguinolent or shreddy discharge from the uterus; and further, that there were no symptoms of sufficient prominence during the time prior to the false labor-pains to occasion a vaginal examination, or to suspect a pregnancy not altogether normal.

April 6th, 1874.—I was called this A. M., to see Francis Titsworth, colored, aged 30 years; married ten years; mother of four living children, and one, a miscarriage of her fourth pregnancy. Her health generally has been good—an occasional attack of intermittent or remittent fever of short duration being the only complaints affecting her since infancy; complains now of much pain in lower part of abdomen, between umbilicus and pubis, she locating it with her hand, and which she says is the "colic." Pulse is somewhat accelerated; tongue moist and thinly coated; skin cool and pleasant to the touch. Inquiries as to the cause of her colic could elicit nothing confirming her opinion as to its presumed nature. Upon further questioning her, I was informed that her last menstruation had occurred about the middle of February; that for three weeks previous she had been troubled with nausea and vomiting, and for the same length of

time there had been soreness and pain in both mammæ; that she had received no blow or injury of any kind in abdomen; had always been regular in menstruation, excepting when pregnant or during the period of lactation, and that the same had never been preceded or accompanied by any pain whatever; that she had always gotten up well from her confinements, and had never suffered with any diseases, uterine or otherwise, excepting the attacks of fever previously stated; that she had suffered from this pain for the past two days, but not so severely as at present time. From this history of the case I was unable to arrive at any positive diagnosis as to its nature, but I ventured to inform her that the pain might be due to pregnancy, of which there were some symptoms, or to an effort of nature to resume the menstrual flow, or possibly it might be a simple colic, as she had supposed. I accordingly ordered half-grain doses of morphia sulphate every three hours for the relief of the symptom. Only two were given, when she became easy and comfortable.

April 7th.—Is still free from pain. Ordered tablespoonful of castor oil to open bowels.

April 16th.—Was called again to-day, in consequence of a recurrence of same pain. There has been no return of menstruation, nor is there any other symptom requiring attention. Ordered the following:

℞. Morphiæ sulph .....grs. ij
Potass. bromidi.....℥ij
Elix. valerian. ammoniæ.....f℥ij

M. Sig. One teaspoonful every hour until easy.

On *April* 17th, 18th and 19th she was visited daily. The mixture as above was continuously given at intervals of four hours. After the third dose on the 16th and on the 19th, the mixture was discontinued entirely and an anodyne liniment substituted, to be rubbed over abdomen.

June 4th.—Was called to-day, because of same pain. Prescribed as before (on the 16th of April), which entirely relieved her of pain in a short time, and she was not seen again until *June* 29th, when there was another recurrence of the pain. She informs me to-day of the viability of the child, having experienced its first movement shortly after my visit of *June* 4th. The morphia and potassium bromide mixture was again ordered and directed to be given as before.

This was my last visit in consequence of this alleged colic, and which I presumed to be nothing more than the irregular pains of normal gestation. There being no other symptom to distract my attention from this supposition, the actual condition of the womb or character of the pregnancy was not determined.

On the 15th of October, I was called to see one of Francis T.'s children, and found her in bed. Inquiring as to the cause of her being there, I learned that it was in consequence "of feeling so heavy, and having a dragging sensation, as if everything was going to drop out." I questioned her as to there being still any motion felt of the fœtus. She responded in the affirmative—stating, further, that the child seemed to be more upon the right side than the left. I asked permission to examine her abdomen, which was granted. Found the abdomen enlarged, presenting the outlines of a pear-shaped tumor reaching upwards towards the ensiform cartilage, with a decided inclination to the right; palpation reveals no tenderness upon pressure, with womb or tumor moveable in direction of median line; auscultation divulges sounds of fœtal heart, and placental bruit in right lumbar and inguinal regions.

Not suspecting anything abnormal in the pregnancy at this examination, one can imagine what was anticipated when I was next summoned to see her, *November* 27th, 1874, it being just a week or ten days over and beyond two hundred and eighty days since the cessation of her menses. I supposed her to be in labor. Instead of finding her thus, she was up walking about, complaining of no pain whatever, and remarked that she had sent for me in consequence of having had for a week considerable flow of blood from the womb, which was now becoming very offensive in odor; that its beginning was ushered in with pains closely resembling those of labor, which continued for twenty-four hours, inducing her to believe she would be delivered immediately, and that she had been free from pain since. She had felt no evidences of life on the part of the child subsequent to the beginning of the hæmorrhage, and she believed it now to be dead. She therefore desired me to take it away. I had her immediately to get to bed, and instituted a thorough examination of the uterus and abdomen, to aid me in the discovery of what the real difficulty was. Upon introducing the fingers into the vagina, they came in contact with clotted blood and portions of membranes in a state of partial decomposition, which were removed. The uterus was found low down in the pelvis, with neck and body enlarged, and os soft and dilated. On introducing the speculum, I found a dark, grumous and offensive blood issuing from the os, with the uterus in a condition of subinvolution, and measuring by uterine probe four and one-half inches—the cavity being comparatively empty. Having withdrawn the speculum, I proceeded to examine her abdomen, which was found much diminished in size, with prominences on either side corresponding to outlines of fœtus as it was then lying crosswise in the abdo-

minal cavity; head in right lumbar region, the body apparently on a half turn, with the back to the mother's front, lying in hypogastric and umbilical regions; legs flexed somewhat on thighs, with knees in the left lumbar region, and feet resting in left inguinal regions. The uterus could be felt in the hypogastric region, separate and apart from any attachment to the fœtus. Thus did I arrive at a diagnosis of extra-uterine pregnancy.

The situation was explained to Francis T., as also the method of taking it away. She was advised, however, to postpone having anything done in that direction until a more pressing necessity should present. A prescription was given for the control of the hæmorrhage, and a vaginal injection directed for the removal of the bad odor from the discharges, which had the desired effect in the course of a few days, and the case was dismissed to await further developments.

August 13th, 1875, I was called to see the husband of Francis T., and during my visit obtained the following statement of her condition: She had been feeling well since I last saw her in December, 1874, excepting a little soreness in the lower part of the abdomen. Appetite was good; slept well at night, and was free from pain. She had continued to gradually diminish in size around abdomen; menstruation was as regular as before pregnancy, but it was more profuse and of longer duration. The child seemingly at times changed its position—the bulk of it being first on one side, then on the other, whether she was standing up or lying down.

November 25th, 1875.—I was called to-day to see Francis T., in consequence of an attack of intermittent fever accompanied with great pain and soreness about the belly. A prescription was made, and the attack of fever broken up; but the pain and soreness persistently continued to a limited extent. After the lapse of a month the intermittent fever returned, and again was it intercepted by treatment. But the pain and soreness continued, notwithstanding remedial measures were addressed to its relief, until March 25th, 1876, when, by reason of mental anxiety, nervous irritation and debility, she determined to have the operation of gastrotomy performed for the removal of the fœtus. The nature of the operation and the risk incurred in the performance thereof was again explained to both herself and husband, and both still insisting that the same should be done, she was from this time put upon a preparatory treatment; and on *March* 31st, 1876, upon my invitation, the operation was performed by Dr. E. T. Easley, of this city—his report of which I herewith append:

"The case, of which the foregoing is so admirable an account,

was first seen by me in March, 1876. It is the same of which I gave the chief particulars, so far as the operation was concerned, in a note to the *American Practitioner*, September last; it was also mentioned by Professor Parvin in his late Address on Gynæcology, at the International Medical Congress at Philadelphia. Dr. Southall's paper, with a recent one by my friend, Dr. A. Sibley Campbell, of Augusta, Ga., and some other late *resumés*, leave little to be said upon the subject. I shall, therefore, limit what I have to say to a brief detail of the essential points in the operation.

The extraction of the dead fœtus having been decided upon in consultation, the operation was undertaken on the 31st of March, in presence of Drs. Cross, Southall, Dibrell, Watkins and Smith. I wish to say, in the beginning, that the patient's safety through so formidable a procedure was secured by the skill and patience of these gentlemen in the parts assigned them during its performance. Especially is she indebted for her final recovery to Dr. Southall's able and careful conduct of the after treatment.

I hold with the Edinburgh school, that a patient fit for operation is fit to take chloroform; it is, therefore, the only anæsthetic I ever give. It was administered, in this instance, by Dr. Watkins.

The position of the child had been ascertained to be directly across the front of the abdomen, with its head in the right iliac fossa, its back to the pubic symphysis. An incision was made in the line of the linea alba, extending from a little above the umbilicus to within an inch of the pubes. Upon coming down upon the cyst, a rich plexus of vessels was found ramifying on its outer surface. These could not be all avoided in the cutting, and gave rise to some bleeding. The cyst itself—dense and tough—was not adherent in front, but on attempting to sweep the hand around it, it was found that it had contracted extensive adhesions below. On opening the cyst wall, the child, of good size and well preserved, was seen to be intimately adherent at all points. There was no sign of liquor amnii; it had all been absorbed. The child was broken up and taken out piece by piece—a somewhat difficult and protracted dissection. After the fœtus had been removed, the cavity was sponged out and cleansed with a chlorinated wash. The edges of the cyst were stitched to the abdominal wound by a fine uninterrupted suture, and the whole closed by deep interrupted sutures made to include the cyst walls. Free drainage was kept up from the lower end of the wound, and the cavity

constantly cleansed with antiseptic solutions until it gradually became obliterated by suppuration and granulation. I succeeded in excluding all exudation, hæmorrhage or fluids from the peritoneal cavity.

The operation was undertaken on account of the exhaustion and irritation of rapidly recurring attacks of pelvic and abdominal pain, and at the urgent desire of the patient and her friends. She is now in good health.

ART. II.—*The Nature, Cause and Probable Mode of Propagation of Phthisis Pulmonalis.* By R. RANDOLPH STEVENSON, M. D., Farmville, Va. (Read before the Halifax (Nova Scotia) County Medical Society, May, 1871.

The subject for discussion to-night is not new by any means. It has engaged the attention of some of the most profound thinkers and eminent *savants* of our time-honored profession, from the days of Hippocrates, down to the present time; and it must still continue to claim our patient investigation and research until more satisfactory results can be obtained in the treatment of this most fearful malady.

I will not take up valued time in giving the elaborate theories that have been advanced on the subject, by our teachers of the past, or, by the writers of the present day, but will commence by stating that phthisis pulmonalis may be defined as a decay, characterized by a consolidation of the lungs, followed by softening, degeneration and purulent expectoration. At the same time, a wasting of the body and other evidences of defective nutrition are always present.

Three forms of the disease present themselves for consideration. The first characterized by slight rigors and fever—followed by cough, expectoration of viscid matter and great debility—assuming sometimes the appearance of a continued fever—with brown tongue—serdes on the teeth and delirium. The case may resemble capillary bronchitis or pulmonary congestion. This is really the case, but in spite of stimulants, blisters and other remedial agents, the pulse becomes more rapid and thread-like; the lips, face and nails become of a dusky hue; a cold clammy sweat covers the surface, and death usually closes the scene in about six weeks. A post mortem examination usually

reveals an innumerable host of small globular substances, designated "miliary tubercles," permeating the whole parenchymatous structure of the lungs. In a person predisposed to phthisis, these tubercles make their appearance, with all of the violent symptoms of a zymotic disease, and life is destroyed by congestion produced by the obstruction that these minute tubercles offer to the entrance of air into the lungs. This always occurs before any large amount of degeneration or softening takes place. This form of the disease might be designated by the name of "acute consumption."

The second form of this disease is usually characterized by cough and occasional hæmoptysis. The expectoration is not so viscid; crepitation irregular; respiration and pulse frequent; heat of chest and body far above the healthy standard. This condition is occasionally alternated by chills and night sweats. The expectoration now becomes purulent and clotty. Auscultation and percussion reveal the progress of decay that is rapidly taking place in the lungs. This form may also prove fatal in a few weeks, but such is not always the case. It may sometimes be checked by nutritious diet, cod-liver oil, &c., and the patient may continue to drag along with the disease in a slow form for a number of years before death comes to his relief.

In the third class (and by far the most common) the progress is much slower. It is usually known as "incipient consumption," a disease that tends sooner or later to destroy the substance of the lung, to consume the flesh and the blood of the whole body, and is attended with the same fatal results as the preceding forms.

Without entering into any lengthy discussion on the pathological or physiological constitution of "tubercle," I will state that medicines so far have been powerless in arresting the rapid types of this disease. In a few instances, the slower forms have been rendered quiescent; few cases, however, are permanently cured. All cases that have been benefitted at all have been through the instrumentality of a pure air, a full and generous diet, and stimulants.

To attempt to cure a disease that has baffled the skill of the most scientific medical men of the present age by the ordinary routine of medicines, is very much like trying to effect an impos-

sibility; but to enlighten our fellow-man upon the great principles that govern life and maintain health, is one of the prerogatives of the physician. It is his duty to stand upon the watch-towers of Hygeia and warn the unwary from the shoals and quicksands of disease and death. He may stand powerless for good at the bed-side of his unfortunate patient, contemplating the brilliant but sunken eye, the total destruction of muscle and adipose tissue—all, all being gradually absorbed; but for all this, he can, by the aid of science, lend intelligent counsel to his fellow-man, and point to him the road to health.

From the foregoing remarks, it must appear that phthisis may be ranked among the "incurables." Shall we content ourselves with this edict and do nothing more? No, our next duty is to try to check this "scourge" in its deadly march. How is this to be accomplished? By certain hygienic and sanitary regulations, and by attention to those great natural laws that govern life and maintain health.

Food, next to purity of the air, determines the degree of the physical well-being of man. It gives beauty of contour to the form, builds up the marvelous structure of the brain, and bestows upon society more of grace and refinement than most of us are willing to allow.

The amount of food required in high latitudes is much greater than in warm countries. Much also depends upon muscular exertion and mental excitement. Food must not only consist of material but power. Baron Liebig, says, that the strength of man is in direct ratio to the plastic matter of the food. Lehmann declares that three magnitudes are espeeially to be considered, 1. That which is requisite to prevent the animal from sinking by starvation; 2. That which affords the right supply of nourishment for the perfect accomplishment of the functions; and 3. That which indicates the amount of nutrient matter which may, under the most favorable circumstances, be subjected to changes in the blood. Hence in a salt fish and potato diet (which is extensively used in the New England States and maritime Provinces), the carbo-hydrates, albuminous matters, the salts and the fats are not combined in due proportions. If the blood is vigorous, plastic and rich in nutritive material, the more rapidly will the separating process repair a lesion. Hence, the sur-

geon should always (if possible) ascertain the condition of the blood before proceeding to operate. The impoverished and scorbutic condition of the blood, caused great mortality in all surgical operations on the prisoners confined at the celebrated prison of Andersonville, during the late American war.

The presence of oxygen in the blood gives it its vivifying properties, ærated as it is through the respiratory apparatus; but to complete the great principle of excitation, impulsion, motive power, it must receive combustible and organizable material. Oxygen then unites with the carbon of the food in the blood of animals; carbonic acid is formed and heat evolved. Animal life is also sustained by respiration.

We have shown that the blood owes its vivifying properties, in a great measure, to the oxygen which it receives from the respiratory organs. An unhealthy atmosphere manifests itself at once in the nutritive powers of the vital current: and the more feeble the respiration, the less rich the blood. Thus oxygen enters by the lungs into the blood, and with it also enters partly into the composition of the tissues; so that it is real food, and it is as necessary to the construction of the human body as the other forms of food which are usually introduced into the stomach.

The air must contain the vivifying properties of its normal standard, or it loses its force, and death is inevitably the result. The mutual chemical action of the oxygen and the constituents of the blood, conveyed by the circulation, constitute the source of animal heat. An impure air diminishes this property. About one hundred gallons of air per hour are received into the lungs, of which about one-twentieth of the volume inspired is oxygen.

Dumas asserts that oxygen is necessary to the conservation of the vitality and proper structure of the globules of the blood; and that the integrity of these organisms is one of the essential conditions to the arterialization of the pabulum of life.

Milne Edwards asserts that the great absorbing powers of the blood exists in the globules. The number of these globules in healthy blood is one hundred and twenty-seven out of one thousand component parts; but sometimes they are observed in disease to descend to sixty-five. Simon and other distinguished physiologists have shown how a careful and nutritious regimen

may increase these globules in the blood of the consumptive, bringing them up from sixty-four to even one hundred and forty-four.

The blood of man is the richest of all the mammalia, containing, according to Berzelius, three times as many hydrochlorates as the blood of the ox. It is distributed, by innumerable channels, through every recess of the body. The blood is not only the source of all the elements of structure; it not only furnishes the materials for all the secretions and excretions, and for all chemical changes, but it is in turn affected by the physical and chemical changes of every vessel of every nerve, of every organ and texture of the body. It is evident, then, that the constitution of the blood will depend upon the food, upon the vigor and perfection of the organs of digestion, respiration, circulation, secretion and excretion, and upon the correlation of the physical, vital and nervous forces. How important then is the function of respiration, and how vital the necessity for pure air!

That the climate of the British Provinces is not favorable for the consumptive, I will admit; and I would not recommend a patient suffering from phthisis to remove from a more temperate climate to this latitude. But the atmosphere of this country is remarkable for its purity. This is proven by the character of the sickness that predominates here. We never witness those malarial fevers and those complicated diseases in some form—of the stomach, liver and bowels—such as are produced by a highly vitiated air, in the paludal districts of Europe, or in the swamps of the Southern portion of the United States. Scrofula in its various forms, and idiopathic erysipelas are the prevailing diseases of this country—maladies that are evidently produced by defective nutrition. Hence, if it was not for the purity of the air, the mortality from consumption would be much greater.

Alimentary substances are divided into two classes—the nitrogenous and the non-nitrogenous. Neither the one nor the other will alone support life indefinitely; if one or the other falls below certain limits, health declines, and ultimately life becomes extinct by inanition. To maintain health, man requires organic and inorganic food. Of the organic, he wants nitrogenous substances for the use of the vital tissues for work; saccharine or oleaginous for warmth. Of the inorganic, he needs phosphates

for the bones, muscles and blood, and salt for its influences over the circulation and the secretions. Prof. Dalton says that a man may be starved by depriving him of phosphates and salt, just as effectually as by depriving him of albumen or oil.

Man, when compelled to hard labor, requires beverages and condiments; he wants coffee or tea or cocoa, or wine or spirits; he also requires salt, pepper and vinegar. To preserve a sound body, then, he requires a mixed diet, and that frequently changed, as the continuous use of oil, albumen and starch will produce a tendency to bilious, rheumatic and arthritic affections, while a deficiency of oleaginous substances tends to produce scrofula, consumption, etc. What suffices at the Equator would not sustain life at the Poles. The ration of the quiet student would starve the active, stalwart lumberman of this country. Hence, the wants of the system differ according to the degree of heat, the purity of the air, and the amount of physical exercise The Bedouin lives on a few ounces of food: the rest is made up by the purity of the air and the indolence of the Arab. A life of moderation, the avoidance of bad air, and the extremes of heat and cold, afforded the celebrated Cernaro the privilege of living on twelve ounces of food per diem.

The distinguished Milne Edwards maintains that the mean quantity required to sustain the life of man consists of sixteen ounces of bread and thirteen ounces of beef daily—the beef to be from cattle killed in their native pastures, when the flesh retains all its natural juices and sweetness. The flesh of all mammalia becomes almost worthless, and even poisonous, if confined for a length of time, as they generally are *in transitu* to market.

Vegetable substances alone will not sustain life for a great length of time in any climate; but, as has been shown, there is a vast difference in the wants of man at the Equator and his actual necessities at the Pole. Nature requires for her existence materials of different kinds. Neither the oil nor sugar will sustain life alone. There must be a combination of these to complete the process of digestion and assimilation. To feed a patient on arrow-root, tapioca and sago would be to consign him to a speedy death. A considerable proportion of the population of the British Provinces, as well as in the northern parts of the United States, live on salt meat, salt fish, and potatoes, using but a small

quantity of bread, and that of the whitest or most unhealthy quality. Here the work of defective nutrition is being carried on secretly and quietly—the vital current being imposed on by thousands of human beings, who are as ignorant of the cause of their destruction as if the science of medicine had no existence and medical advisers had all passed away.

Paracelsus tells us that "when a man eats a bit of bread, does he not therein consume heaven and earth, and all of the heavenly bodies, inasmuch as heaven by its fertilizing rain, the earth by its soil, and the sun by its luminous and heat-giving rays, have all contributed to its production, and are all present in the one substance?" Brown bread is the most nutritous of all the forms of the "staff of life." It has been proven that dogs fed exclusively on white bread made from sifted flour, died in forty days; but when fed on black bread (flour with the bran), they live without disturbance of health. History shows that bread is the most important item in the soldier's diet, and that many a campaign has been lost in consequence of the inferiority of its munition, bread.

Mayer has shown that in discarding the commercial bran we throw away fourteen times as much phosphoric acid as there is in superfine flour. In this bran are lodged the phosphates and nitrogenous compounds—the source of living tissues. The nutritious Graham bread, the coarse oatmeal of Scotland, and the black bread of Russia are examples. They contain all the gluten, all the phosphates and nitrogenous compounds, as well as the starch of the grain. Hence the use of potatoes to the exclusion of bread is extremely hurtful, as they are composed principally of starch and water. We find that the British soldier receives in home service, of solid food, 40 ounces; the seamen of the Royal navy 39 ounces. The full diet of the London hospitals ranges from 25 to 31 ounces of solid food, besides from 1 to 5 pints of beer daily. The Russian soldier receives 50 ounces, the Turkish about 40 ounces, the French nearly 50 ounces, the Yorkshire laborer 50 ounces, and the United States navy and army about 50 ounces per diem. In all the diet-tables from which these data are taken, we find no mention made of fish, salted and dried; and in one instance only do we find the article of salt beef mentioned, and that is in the case of the English navy, when the troops are on duty in the torrid zone.

From these facts we arrive at the conclusion that the character of the diet in this country tends to increase rather than diminish the "fell destroyer." The salt fish, white bread and potato diet contain too small a percentage of the nitrogenous and carbonaceous substances for the preservation of a healthy balance in the animal economy.

Having shown how necessary wholesome food and pure air are to the preservation of life and health, and that defective nutrition tends to debility, and hence lays the foundation for phthisis, and having pointed out some of the means to prevent it, yet to rid ourselves more fully of this dreadful scourge, we must view it in the same light as other zymotic diseases.

Pure tubercular matter constitutes the true material by which phthisis is propagated from one person to another, and this matter (by a slower process) is as capable of producing phthisis from one person to another as is the specific matter of small-pox, scarlet fever, &c., to produce these respective diseases. That its dissemination through society has not been regarded with the same degree of fear and distrust is true; but that it has proven more fatal than other self-propagating maladies is a melancholy fact too true to be denied. Why is this? Because the teachings of our time-honored profession have been in collision with the truth in regard to the real nature of the disease, and the remedies and means of prevention have been consequently impotent for good.

In support of this startling view, I may mention that the late Dr. Rush, of Philadelphia, states that phthisis was unknown among the North American Indians prior to the discovery of America by the European, and Dr. Livingston informs us that phthisis does not exist in the interior of Africa; and only along the coast, where the natives come in contact with the whites, do they suffer with it. Dr. Hayes, in his celebrated account of the Arctic regions, informs us that he saw no case of consumption amongst the Esquimaux Indians. The South Sea Islanders knew nothing of this disease until they came in contact with the European, although its ravages are such now that it threatens to exterminate them. It prevails to an alarming extent under all those social conditions that favor the propagation of diseases of the zymotic group; hence, in some families all the members, except, perhaps, one or two, will fall victims to it. Parents will

transmit it to their offspring; close and ill-ventilated houses, churches, and other places for public assemblies, are all favorable to its dissemination; consequently we are forced into the belief that it spreads through society by hidden germs contained in the tuberculous matter that is thrown off by a person laboring under phthisis. I have seen in my own practice a large family of children all more or less afflicted with consumption; yet the parents of these children were apparently free from the disease, as well as their ancestors, as far back as they could be traced.

In conclusion, may we not hope that wise sanitary regulations, based upon a revised pathological view of the disease in question, may be inculcated by our teachers in medicine, and a more thorough and searching investigation of its ravages laid bare by incontrovertible facts? As long as the medical profession are content to rank it among the "incurables," or attempt to say that it is a disease that follows a high order of civilization, or that it seems to be hereditary, or use some "placebo" of this sort, just so long will we slide along in the same old grooves of our ancestors, without attempting to meet the real issues in the case.

If strict legislative enactments are deemed necessary for contagious diseases, and quarantine regulations are proper to protect large communities from pestilence, why may not phthisis be taken into the same category as all of those contagious and infectious maladies whose sourge is not carrying to the grave half so many victims as consumption?

ART III.—*Note on Chloral Hydrate.* By J. A. LARRABEE, M. D., Prof. Mat. Med. and Clinical Lecturer on Diseases of Children in the Hospital College of Medicine, Louisville, Ky.

As a hypnotic, chloral hydrate has steadily won favor from the day in which it was first handed to the profession from the laboratory of Liebriech. At the present time, it occupies a very high position in the armamentarium of the physician, being one among the few medicines upon which we feel willing to rely at the bedside. There are, however, other properties possessed by this agent which, if less important, are certainly highly valuable

and are destined to extend its therapeutic application beyond the simple indication mentioned.

I have found chloral hydrate, in strong solution, to be the most agreeable disinfectant and reliable antiseptic. Administered in febrile conditions it is an apyretic of no mean value; and applied locally in union with camphor or in strong solution, it is a descutient, anodyne, and alterative of great power. Some three or four years ago my attention was called by a medical friend (Dr. W. W. Goldsmith, of this city) to the wonderful preservative properties exerted by chloral upon meats &c., exposed to putrescent influences. I also witnessed its wonderful power in preventing or delaying decomposition in dead bodies exposed to high temperature. My experience with it, since that time, in many and various conditions justifies me in saying that it forms the best application for injection into suppurating sinuses, as in the hip, long muscles of the back, &c., cleansing and healing rapidly these fistulous tracts and promoting the rapid healing of superficial ulcerations.

It will arrest the formation of *furuncles*, *carbuncles*, and cause rapid *resolution of indolent* swellings. A number of children were selected suffering from most *offensive ozœna* and strumous sores. In less than a week all fetor ceased and *recovery* followed the use of a mild solution with the nasal syringe.

The most wonderful result was obtained in a lot of children suffering from scorbutic gums. Six of the worst cases were selected; in some of them, the gums were sloughing, and all presented a frightful appearance. The local use of chloral hydrate in water as a wash cured these gums in eight days—sound and well—constitutional treatment being kept up during the mean time. It is necessary, however, to state that the same constitutional treatment had been kept up without benefit for a month previous.

The Consumption of Opium in the United States is about 300,000 pounds a year, and is yearly increasing. Since Jan. 1 1877 [to July 1, 1877], 110,357 pounds have been received in New York alone, valued at $557,199.—*True Citizen*, Aug., 1877.

ART. IV.—*The Use of Astringent and Tonic Baths in the Summer Complaint of Children—Oak and Willow Bark Decoction.* By R. G. WHARTON, M. D., Port Gibson, Miss.

No subject connected with clinical medicine can be of more general interest than that of some means by which the great mortality among children may be diminished. Especially is this the case in our large cities and towns, where statistics show that the *ratio* of deaths of children under five years of age ranges from 10 to 40 per cent. of the total mortality. The attention of physicians, and of sanitarians especially, is now directed to this fact more than ever, and in many of our large centres of population very great improvements have already resulted from the efforts which are being made in this direction. But it is not in cities and towns alone that the mortality among children is very great; in our villages and county places it is also disproportionately great. Among the diseases which cause such great mortality, disorders of the alimentary canal are perhaps the most important, as they prevail everywhere during the hot months, and the treatment of them requires all the skill of the most accomplished physician.

The object of this short paper is to direct attention to the great value of astringent and tonic baths in the summer complaint of children. It is, of course, not claimed to be a new remedy, or one that is not much used by the profession; but still it seems to me to be one of such great value that it is well worthy of having our attention drawn to it again. After the diarrhœa has lasted a few weeks—especially with children who are teething—we all know how difficult it is in many cases to check it. We may give astringents, small doses of mercury, anodynes, lime water, and all the usual remedies, with only very temporary relief, while the little patient becomes every day weaker and less able to take nourishment.

Many a time, when the case seemed almost hopeless, have I seen the baths of oak and willow bark apparently snatch the patient from the very verge of the grave, and it is from an experience of its great value in such cases—an experience of thirty years—that I would emphasize their importance.

It is easy to understand the great value of a remedy which

will, when applied to the surface of the body, check the discharges of the bowels and give tone to the whole nervous system. The stomach is relieved from the ingestion of medicines which, however necessary they seem to be, often are rejected, or, if retained, interfere seriously with the digestive process; while the baths, if properly used, strengthen the stomach, relieve nausea, check the discharges from the bowels, and give tone to the digestion. They do not lose their effects by continued use, as most medicines do, and they do not interfere with the exhibition of internal remedies when they are thought to be necessary.

I do not undervalue the importance of medicine when I say that I have seen more good done in bad cases of summer complaint by the use of the baths than by all other means. During the present season I have seen some very bad cases relieved promptly, after the failure of well-directed treatment with the established remedies.

The baths are prepared by boiling oak and willow barks to a strong decoction. The patient is bathed in this decoction at a temperature of 80° F.—that is, tepid—as a warm bath is too relaxing, and he will not be able to bear a temperature cold enough to cause a shock. He must be kept in it from five to ten minutes, according to his strength and susceptibility, and it must be used twice a day in severe cases. The same water will be good for two days in the hottest weather.

I shall write nothing about the use of other means which are well established, and whose value is everywhere recognized by the profession in the treatment of the summer complaint. My object is simply to insist on the great value of the baths, as their importance does not seem to be properly appreciated by our systematic writers on the diseases of children. It may be a little troublesome, in some places, to prepare the baths, and it does not seem to be as elegant a prescription as some would like; but its great value as a remedial means will well compensate for these disadvantages; and those who have once given it a fair trial, will not fail to appreciate its importance.

The Proceedings of the Richmond Academy of Medicine have not been worth reporting for some time past. Hence no report has been made recently.

ART. V.—*Recent Progress in Dermatology.* By GEORGE H. ROHE, M. D., Baltimore.

The writer believes it proper here to refer to the flattering evidences of the activity which exists in this long-neglected branch of medicine at present in this country. The publication of the two* treatises on diseases of the skin within a few months of each other, is certainly an evidence of active work as well as demand for such literature, while the continued prosperity of the only journal† devoted especially to skin and venereal diseases in the English language, must be alike gratifying to editor, publisher and readers.

The work of Dr. Duhring, as well as the Atlas of Skin Diseases published by him, has received the most unqualified praise from competent judges at home and abroad. It is, we do not hesitate to state, the best work on the subject in the English language. More modern in pathology than Wilson, clearer and more methodical in arrangement than Fox, fuller and more accurate in the clinical history and diagnosis than Neumann, and thoroughly in accordance with the most rational ideas of treatment, it furnishes an evidence of our progress in cutaneous medicine of which we may well be proud.

Thin‡ and Geber§ have recently investigated anew the pathological anatomy of **Lupus Erythematosus**, and have found the opinion of Neumann, Geddings and Kaposi, that the morbid process begins in the sebaceous glands, not unqualifiedly true; but that the first traces of cellular new-formation are discovered in and around the capillaries, especially of the papillæ and upper layers of the cutis.

Winternitz, in a careful study of **Pellagra**,‖ arrives at the conclusion that "pellagra, as a peculiar, individual pathological process, occurring only within a limited geographical area, does

* *An Elementary Treatise on Diseases of the Skin, etc.* By Henry G. Piffard, A. M., M. D., etc. 8 vo., pp. 374: Macmillan & Co., London and New York, 1876. *A Practical Treatise on Diseases of the Skin.* By Louis A. Duhring, M. D., etc. Phil.: J. B. Lippincott & Co., 1877. 8 vo., pp. 618.

† *Archives of Dermatology*—a quarterly journal of skin and venereal diseases. L. Duncan Bulkley, A. M., M. D., Edtor. New York: G. P. Putnam's Sons.

‡ *Abst. in Arch. of Dermatology.* II. 8, Ibid. III. 1. ‖ Ibid. III. 2.

not exist." The various symptoms collectively termed pellagra in certain parts of Italy, exhibit no local peculiarities whatever, and may occur in the most varied combinations, here as elsewhere.

Of the practical advances in dermatology, probably the most important is the **Use of the Curette** which was introduced into use in this department of surgery by Professor Volkmann, of Halle. Since it was first recommended by him in 1870,* for the treatment of lupus, it has been used with success by Hebra, Jr., Veiel, Squire, Wigglesworth and others, by whom its application has been extended to the removal of other new-formations and hypertrophies. It has been used by Hebra in lupus erythematosus, epithelioma, teleangiectasis; by Neumann and others for removing the indurated tubercles sometimes found in acne, etc. Molinari has used it in a case of localised and infiltrated eczema, and in several cases of condylomata about the genitals with complete success. For the removal of circumscribed patches of psoriasis and the indolent surface and borders of old ulcers, we can conceive of no more rapid or effective mode of treatment. It is so generally useful that doubtless many other applications will suggest themselves to every reader.

A novel operation has lately been suggested by Mr. Balmanno Squire, of London, for the removal of the very disfiguring **Vascular Nævi** of the face† (port wine stains of the skin). It consists in parallel linear scarification of the nævus after freezing with the Richardson's ether-spray apparatus. No pain or hæmorrhage occurs, and the result is a more or less near approach to the normal appearance of the skin. The incisions heal by immediate union, and, as a consequence, no cicatrices result. If the first operation is not completely successful, it should be repeated, varying the direction of the incisons so as to cross the first lines at an angle of about 45°. Mr. Squire has also used this operation in the treatment of those slight lupus infiltrations which remain after scooping out the affected spot

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* Volkmann—Ueber Lupus n. seine Behandlund. *Sammlung Klin. Vorträge.*—Leipsig, 1870, pp. 17.

†Squire—On Port Wine Mark and its Obliteration without Scar. London, 1876, and *Archives of Dermatology*, II, 4.

with the curette. He reports* five cases thus treated with very flattering results.

Modifications of the *Galvano-Caustic Apparatus* have been made by Neumann and others, rendering this agent available for the destruction of various hypertrophies and new-growths of the skin. Its application must, however, necessarily remain a limited one, and, with few exceptions, equally good results may be obtained by the use of the curette, or the various caustics.

For the treatmant of old varicose and venereal ulcers, **Bisulphide of Carbon** has been recommended by Guillaumet†. The vile odor of the agent is said to be removed by combining it with iodine, as follows:

℞. Carbon bisulphidi.....℥ij.
Tinct. iodini.....℥ss.
Ess. menthæ viridis.....gtt. xvi. M.

The strength must be adapted to the rebelliousness or chronicity of the ulcers. The mode in which it is used is to apply the liquid with a brush of cotton or charpie, being careful to avoid getting too near a flame. The brush is passed rapidly and lightly over the surface, which is then lightly dusted with subnitrate of bismuth. A layer of charpie is applied over this and the dressing confined by a bandage. One application a day is usually sufficient. It has succeeded in effecting a cure after the failure of iodoform. Its application causes severe pain for a few moments.

As a simple dressing, or as a basis for the application of various remedies in the form of ointment, **Vaseline**, a hydro-carbonaceous soft-solid, obtained from petroleum, is an elegant preparation. It is not likely to get rancid, and makes a good vehicle for any agent likely to be used except alcohol or caustic alkalies. [In this section of country **Cosmoline** is more or less generally used, and is in all respects equal to, if not superior to any agent of its class.—Ed.]

Mr. Squire has lately introduced a **Glycerite of Acid Nitrate of Bismuth**‡ as a local application in various diseases of the skin. A drachm of the nitrate dissolves in an ounce of glycerine, but

* *Med. Times and Gazette*, Aug. 26, 1876.
† Abstract in *Arch. of Dermatology*, III. 2.
‡ *Med. Times and Gazette*, Dec. 9, 1876; *Monthly Abst.* Feb. 1877.

is slowly precipitated upon the addition of water. This will probably be of use in chronic eczemas and as an injection in chronic gonorrhœa, but no experience with it has yet been published.

Neumann* has recommended a solution of one part carbolic acid to three or four parts of alcohol, as a local application in the diffusely reddened patches of **Acne Rosacea**. A number of cases are reported by him where its use was followed by rapid cure. When there is much infiltration or vascular ectasis, it is not of much benefit.

Fleischmann,† upon the evidence presented post-mortem, concludes that **Pityriasis Rubra** (Hebra) is a trophoneurosis, due in the majority of cases to solitary tubercles in the brain. He states that in children who died with pityriasis rubra, the tubercles were always found.

ART. VI.—*Address Delivered on the Occasion of Retiring from the Presidency of the Alumni Association of the Bellevue Hospital Medical College, Sept.* 26, 1876. By CHARLES A. LEALE, M. D., New York City.

Alexander Von Humboldt, in the preface to his work on *Cosmos*, tells us that intercourse with men of rare ability led him, at an early period in his career, to the conviction that without serious devotion to the science of individual things, all great and general views of nature could be nothing more than airy dreams. (Vol. I, p. 8.) After a long life, devoted not only to the investigation of minute objects, but to the exploration of the highest mountains and the navigation of the largest rivers and oceans on earth, this learned man re-uttered this conviction, becoming more and more convinced, as he advanced in age, that there was much to be revealed by minute investigations by following the astronomer to the vast regions of space. So it is to-day with the physician desiring to arrive at a correct diagnosis, or to solve the mysterious workings of disease, its cause, its prevention, and its cure:—he calls to his aid, first, his five senses; then, as adjuncts, what is known of the art and science

* *Baltimore Physician and Surgeon*, Dec. 1876.
† *Vierteljahresschrift fur Dermat. and Syph.*, p. 201, 1877.

of medicine, together with the numerous useful aids for physical, microscopical and chemical diagnosis; then, after he has become familiar with the etiology, the cause, and the duration of disease, and understands what unaided nature can do towards restoration, he is in a position, and not until then, to presume to assist to a favorable termination, or to divert what otherwise might prove fatal, if neglected. He is not confined to any dogma or theory; he is neither restricted by such fanciful creeds as those attributed to allopathy, homœopathy, electropathy, etc.; he does not confine himself to the water courses of a Presnitz, nor to the stern manipulations of a Message; he cannot expect to grow as the vine while receiving the influence of the blue rays of light, to the exclusion of all others. He is as free from all such boundaries as the atmosphere surrounding our earth from which he may separate the oxygen. He finds in the animal kingdom his phosphorus for the depleted brain; he is often encouraged, amidst the many uncertainties of his art, by the specific effects of the cinchonas, or the soothing influences produced by the poppy, from the vegetable kingdom; while in the mineral, far beneath the surface, he extracts his iron to strengthen and cheer, he procures his iodine and hydrocarbons from the sea. He, when necessity requires, calls to his aid heat, light, electricity and magnetism, and graduates the quantity of each according to his own wants.

The life of students is one of continual labor and perplexity; yet the rewards to the earnest seekers after truth are sweet and a sufficient recompense. They do not wish to dwell with Raselas and Nekaya in the happy valley where the sons and the daughters of Abyssinia lived, only to know the soft vicissitudes of pleasure and repose, attended by all that were skilful, to delight and gratify whatever the senses could enjoy; nor, as history relates, when continents remained undiscovered, Juan Ponce de Leon and his followers left Spain for the unknown land in quest of a fountain of immortality, floating over a summer sea, as men intent on pleasure, to whom time was long, and burdened with no serious duties—sailing from island to island, touching here and there, as fancy led them, seeking the safest and pleasantest coves, where the shades were deepest in the noonday sun, and the waters coolest; where the fruits were sweetest, the Indians

most friendly, and their women loveliest. Not so with the student who remembers that art is long and life short; whose exercise of self-denial by refraining from pleasure to occupy the fast-fleeting hours by profitable research, or the practical demonstration of some recognized law, and coming into direct contact with the mysteries and the beautiful structure of the human body.

Prof. Huxley, last Friday evening, told us of the harmonious mechanism to be found in our common horse—so complete and perfect that no artificial machinery has been devised capable of producing the same amount of force from so compact a body and with so little fuel. If the naturalist glories over one of the brute creation, how much ought we to find to delight us in investigating man, who is acknowledged to be next to God!

The medical profession of to-day contains in its ranks the hardest worked of all professional men, and we often behold with wonder the results of untiring zeal, making great strides in all the scientific and practical branches. If a new discovery is made, it is quickly confirmed on both continents; or let some one claim to have discovered a new element, and thousands, before the echo dies, are seeking either to disprove or confirm it. Physicians, as their practical duties increase, sometimes get running into grooves, wearing deeper and deeper every year, and in the end often find that where they expected to receive the greatest consolation all is forgotten; or if, from exposure, they become unfit for work, they immediately sink into the place for the neglected, often passing the remaining years in sorrow at opportunities lost, or in the reflection that so much useless and unimportant labor wore them out. Dr. Golden Bird stated, while his waiting-room was crowded, that before forty years of age his brain was wrecked. Many must, from accident or disease, fall gloriously, in full harness, by the wayside to fame, well meriting the epitaph: His labors were unending; rest during life he never expected, and his greatest consolation in death was that he had benefited his race, and in the end hopes for peace.

Some tell us that every avenue to fame is already filled. To such we would mention what can be found in the pathological departments of our medical museums in New York, where there are hundreds of unpublished histories, capable of filling a large volume on pathology, giving results that we are frequently told

by some novice have never before been obtained—they claiming priority, when corresponding specimens can be seen in the Wood Museum, the museum of the New York Hospital, and several others in the city. It was just in such places, among the Hunterian collection and in the autopsy room, that Sir James Paget worked for nearly twoscore years, having his hands so often immersed in the poisons of the cadaver. No effect was produced upon him, until after a long absence he again became susceptible, when he was almost fatally poisoned. It was while standing for hours in the cold dissecting-room that he contracted pneumonia and nearly lost his life; yet, as he said, in response to a late testimonial, he worked without expecting to receive such honors as were conferred upon him by his colleagues and the nation.

But all are not so bounteously rewarded, and by far the larger proportion die without receiving the honors due to them from the present generation. But, as our language is spoken at present in nearly every quarter of the globe, and the people using it are so rapidly increasing in number and power, we can readily understand what power the discoverer or writer has. He can never, as the discoverer of gold in California, die forgotten as a pauper; and if he has had the ability to place himself clearly on record, he will not be deprived of his just dues. Mr Hutchins tells us, in his delightful description of the scenes of wonder and curiosity in California, that specimens of one of the large trees from the Yosemite Valley, with its foliage and cones, were sent to England for examination. Prof. Lindley, considering it as forming a new genus, named it "*Wellingtonia gigantia*," which was not pleasant for us to hear; therefore, Mr. Lobb, a gentleman of rare botanical attainments, who has spent several years in California devoting himself to this interesting and, to him, favorite branch of study, decided it to belong to the toxodium family, and consequently that it was not a new genus, but is known among scientific men as the *Sequoia gigantea* (sempervirens); but to make sure that the name would not leave America, and to prevent a loss, they called it *Washingtonia gigantia*. So it will be with the discoverer in scientific matters—his name and his nationality will finally be known.

We have recently heard that Dieulafoy has been knighted for his improvements in aspiration. But five years before his claimed

discovery, the writer, with over a hundred students, witnessed our Professor of Theory and Practice aspirate the thorax with a beautiful apparatus devised by himself; and our American medical literature informs us that the present President of the American Medical Association has aspirated for the past twenty years, and that now his operations of thoracentesis alone exceed three hundred, yet by probably over one-half of the profession this fact is unknown.

Dr. Dunglison, in his *History of Medicine*, says that the Egyptians appear to have been the first nation which cultivated medicine, and mentions many sanitary rules observed by the priests and people. They were so particular, that even to the kings, a fixed quantity of meat and drink was prescribed. Diadorus informs us that almost every function, even the act of generation, was regulated, and had a time assigned for its performance; also that each Egyptian was expected every month to make use of emetics, purgatives and clysters. Herodotus asserts that in his time there was in Egypt a particular physician for each disease—one occupying himself with diseases of the eye, a second with affections of the teeth, a third with those of the stomach, &c. According to the laws of Theodoric, which were followed until the eleventh century in a great part of the west, the Code states that no physician is allowed to bleed a noble-woman or girl without a relative or domestic being present; and in case of controvertion of this law, he shall pay a fine of five pence; also, when a physician is called upon to attend a patient, or dress a wound, he must immediately after having seen him, give surety and agree upon the price to be paid upon his cure, but he shall not demand anything, should the patient die. For the cure of a cataract he shall receive five sous.

This is almost as severe as the present Chinese treatment of the unsuccessful native doctor. When a native dies, his physician is bound to the corpse until it is placed in the coffin; after enduring this punishment for his lack of skill, for some time, he is released upon the payment of a considerable sum to defray the funeral expenses. (*The Doctor*, January 1, 1876).

Let us now consider some of the *Public Duties of the Physician*. If clergymen and lawyers consider it an honor and a duty to be represented on our hospital and other medical boards,

thereby extending their field for observation and usefulness, so physicians not only have the right, but it is a part of their duty to endeavor to instruct the public. We will therefore look for them in the halls of congress, and in local gatherings actively engaged. Why should the discussions of sanitary science be entirely left with those not connected with the profession, any more than questions of finance left to lawyers? When the general government is called upon to borrow large sums of money, and to decide the rate of interest on her bonds, she selects a number of bankers of acknowledged ability, and through them, more advantageously places her paper in the market. So ought nations, when the health of the nation is involved, be willing to call for the best talent in the country. We admit that much has been done by our boards of health, quarantine, marine service, army and navy; but their powers are often so contracted in many respects, that much of their good is lost. When questions like the Vivisection bill of the last session are advanced by men not having the least idea of what they are doing, then it is the duty of the profession at large, as it did last winter, to assert their right and convince the legislators that we do not want anything that will not benefit man; we must gain instruction, and we cannot expect to have an Alex. St. Martin to accommodate every class of physiology.

Probably the most conspicuous doctor and politician to-day is Professor Rudolph Virchow, who, as the correspondent "Med" states, has a personel by no means striking. He is below the average German stature, of a dingy complexion, with an impassioned expression. One fails to detect the depth of his researches in science, or the strong will, or the cutting sarcasm which characterizes him. An hour in the pathological institute demonstrates his accurate study in that part of medical science to which he has devoted the best part of his eventful life. On the same day that he lectures, he is to be seen from 9 to 11 A. M. demonstrating with a vast amount of material, cellular pathology, and from 5 to 7 or 8 P. M., in the chamber of Deputies of Prussia, of which he has recently been elected Vice President, over the nomination of his predecessor, hard at work in the Royal Geographical Society. Besides these official appointments, he is chief editor of a popular journal of science, contributes occasion-

ally an article to scientific bodies, and gives popular lectures in the winter. In the revolution of 1848, he fought as a common soldier behind the trenches, and on account of political doctrines, went to Wurzburg, where, while in exile, the book of his life, "The Exposition of Cellular Pathology," was written; and by his worth, forced the government, on the urgent demand of scientific men, to recall him to his department in the University, and later, Prince Bismarck challenged him to duel, whose acceptance he had the courage to refuse.

One hundred years ago, there were only two colleges in the United States having the right to license to practice medicine. The first was established in Philadelphia in 1763, and the second in New York city in 1768. At the last meeting of the American Medical Association, a request from a foreign medical society was received, asking for a list of reputable medical colleges; but for some reason this request would not be complied with, perhaps to the great injustice of practitioners in that far distant country, or to the protection of the unprincipled. According to the medical register, we now have fifty-three medical schools and colleges in the United States, three of which are for women.

To organize and keep in prosperous, harmonious action a large unendowed literary institution, is no easy task. But with the gigantic infancy of Bellevue Hospital Medical College, she has continued to prosper. Even at her birth, not three colleges in the United States could claim to be her equal. The majority of her professors were teachers of acknowledged ability, and many of them were authors of medical and surgical works, of such recognized value as to be largely used not only in foreign countries where the language is spoken, but to be translated into foreign tongues.

We are often told that the supply of physicians is greater than the present need, but before giving a hasty reply, let us examine facts. In New York city, with a population of over a million, we have 1,190 regularly qualified physicians, or one to eight hundred and forty of the inhabitants.

The Medical Register and Directory of the United States of 1874, gives the names of over fifty thousand of all degrees and qualities practising as physicians in the United States, which, with a population of forty millions, gives one to every eight hun-

dred of the inhabitants; surely if properly distributed this is not in excess of the demand.

Permit me to quote a few lines from the writings of one of the most profound statesmen America has produced or the world known, so applicable to the prosperity of our colleges since the termination of our late war: "Give us peace, and population will increase beyond all experience; resources of all kinds will multiply infinitely; arts will embelish the land with immortal beauty; the name of Republic will be exalted, until every neighbor, yielding to irresistible attraction, will seek new life in becoming part of the great whole, and the national example will be more puisant than army or navy for the conquest of the world."

Probably the greatest need in medical colleges at the present time is more systematic instruction in medical jurisprudence. Physicians are frequently called to testify in courts; and at times, the most qualified to give evidence, are those most embarrassed. The recent Ricardo-Bravo case, where evidence damaging to the witness was unnecessarily drawn out by the investigators, and the necessary medical evidence not called for, necessitating a new trial, were justly causes of severe censure.

It will probably fall to the lot of at least three-fourths of all practitioners of medicine to be called to attend cases of suicide, murder, railroad accidents, etc., and with comparatively little additional instruction, they would at once be able to assume legally the responsibilities. Medical jurisprudence covers such a vast field, that it would probably be impossible for a special professor to deal with the many perplexing questions, which each professor could so much more easily explain in his own department. As has recently been seen, he would have to be an able expert to decide all the questions put at a recent coroner's inquest in Boston, where a young school teacher died while taking ether in the office of a physician, who was unjustly supposed to have been in the act of producing an abortion, but was honorably acquitted by his peers.

The dentists have raised another question in regard to the establishment of a professorship in oral surgery, and grant the degree of M. D. to those desiring to practise that specialty, without requiring the candidate to pass in several of the other branches required of the one intending to do general practice.

This, on the part of the dentists, may appear very easy; but the experienced surgeon, who has had to contend with some of his most formidable complications while operating in the mouth, knows that before he finishes he may be compelled to ligate the carotid, attend to a flooding from induced miscarriage from shock, and he must be familiar with physical diagnosis, and in fact be acquainted with at least as much of the theory and practice of every branch as is ordinarily required of the regular graduate. A man assuming to render his patient insensible by an anæsthetic, ought to know how to meet any emergency that might occur. If, during an operation, his patient aborts, and has profuse and perhaps fatal uterine hæmorrhage, or from some degeneration of the arteries, he suddenly finds his patient deluged with blood, he will then appreciate the necessity of knowing what the law would most surely require of him.

Secret societies, as a rule, in schools of medicine, theology and law are not productive of good results, notwithstanding the best intentions of their founders and members to promote the welfare of the college, and protect her from all assailants; yet it has been found impracticable to devote sufficient time, and impossible to continue from year to year with the varied elements of success, and gather from each succeeding class the material necessary for its peaceful and useful operation. Then, too, there is great danger that questions may arise which students have no right to consider. They are children drawing their mental food from the ample bosoms of their noble mother, and it will be well for them to imbibe as much as possible of that mental nutrition while opportunities last, carefully avoiding all sources of irritation. Although before graduating they may feel amply strong, and have sufficient strength and confidence to walk alone, yet they will find that the change of diet will produce violent colic; they may be often led, with St. Paul, to exclaim that it is hard to kick against the pricks, which will surely be tauntingly placed before them; they will think a respect for their own dignity calls for and necessitates the infliction of self torture. The only society connected with a medical college, and the one capable of gratifying all the desires of the student in regard to fraternal feeling, is the Alumni Association, to which every medical student, so soon as he has received his degree of doctor of medicine, without

any other formality, becomes a full and active member, and so remains while he keeps the promises made to his alma mater.

This Alumni Association is now in the tenth year of its existence, and every graduate of the Bellevue Hospital Medical College in good and regular standing is enrolled upon its list of membership. The general meetings of the Association should occur once yearly. At these meetings, all alumni ought to be present, perpetuating the fraternal feeling that commenced when youthful vigor, ambition, desires and hopes were most ardent. We hold our own futures within the grasp of our own energies, abilities, opportunities and powers of endurance.

It requires a strong man, physically and mentally, to be able to resist the allurements of early professional life; hence, some are blindly led by flattery into forbidden paths, and before they awake from their dreams, find that they are beyond the paths of rectitude. Another may, from the administration of some simple and well-known medicine, quickly remove all trouble in what was supposed to be an incurable illness, and his patient may be led to proclaim him to be wonderful, immediately endeavoring to have him cure by the same method a multitude of diseases beyond his experience, or which are acknowledged to be incurable. On the other hand, he may commence with a malignant disease, do all that art and skill possibly can to avert as long as possible the certain result, have his prognostications follow in succession as he has scientifically announced them; he may expend much vital and mental force, and show far more ability than his supposed successful neighbor, but in the immediate result only reap a fractional part of the pecuniary reward. But if he have patience and continue to do his duty, time will reveal a future to him far superior to that of his more superficial, yet, in the commencement, prosperous neighbor.

Quackery has always flourished, and in the sixteenth century we are told of that prince of ignorant boasters, Philippus Aureolus Theophrastus Bombastus Paracelsus, who brought his patient before a magistrate to collect one hundred florins for the administration of three pills; the magistrate decided that he should recover only the customary fee, at which Paracelsus declared that he would leave the inhabitants to their eternal destruction, which they deserved. He then returned to Strasburgh and

thence to Hungary, where he took to drinking: and notwithstanding his boasting that he possessed a universal medicine to secure immortality, he died in a hospital in the forty-third year of his age. The vanity of Paracelsus did not surpass the assertions of quackery of to-day. He asserted that Hippocrates was produced by the genius of Greece, as he was by that of Germany, and that all the universities united had not as much knowledge as his beard, and that the hairs of his forehead had more instruction than all the writers put together.

Quackery is flourishing probably more to-day than at any period of the world's existence. We have quackery in law, quackery in theology, and quackery in medicine. Flagrant examples of all of them could five years ago be seen every day, between the hours of 3 and 5 P. M., in golden chariots drawn by six or eight horses so fantastically harnessed as even to put a Barnum to blush, driving through Central Park. But of the number then to be seen, where now do we find them, as they surely have been speedily "cut down like the grass and withered as the green herb?" They have received the fate of that boasting King Nebuchadnezzar, and are now without their reason: several of them—and those the most wealthy—are inmates of lunatic asylums. Yet Hembold, of buchu fame, and Ayers, of pill notoriety—the former an example of rapid accumulation of wealth, the latter reputed to be the largest owner of real estate on the line of the Pacific—are no sooner declared legally dead than we received a bitter Walker from California. In a divorce suit, this past summer, it is said he was reported before the referee that his annual income exceeded one hundred and twenty-five thousand dollars. The only difference with all of them will be a slight variation in the ending of the "S. X. 1860."

During the past summer, long debates occurred in the English Parliament concerning the registration of women as physicians in Great Britain, and the question is not yet settled. One member, in introducing the bill for amendment of the Medical Act, with a view to allow foreign qualifications to be registered in England, said that at present the only way for women to prove their competency to practice medicine was by studying and taking their degrees abroad. There was a vast field for female practitioners in India, which would of itself absorb more women

doctors than were likely to present themselves. There were in India 50,000,000 Mohammedan and Hindoo women who would never allow a man to come into their apartments to prescribe for their ailments, and the want of women doctors was felt so strongly by the Indian Government that at Madras and Bareilly various attempts had been made to educate a body of native young women in order to give to their own sex the benefit of medical treatment. The bill would open this field. It would also enable women who were now practising in England to do so legally, whereas at present their certificates were irregular. (*Medical Times and Gazette*, July 8, 1876.)

We think that our College Faculty can be congratulated for the manner in which they decided the question of women physicians nearly ten years ago, by not permitting mixed classes of the sexes at their didactic lectures, nor in the dissecting rooms. But the Faculty aided in the establishment of an institution where women could have all the advantages required for a thorough education, and consented to become part of a board of examiners to testify by their signatures that the successful candidates were duly qualified to practise in the profession. We especially of New York have done all in our power to give the experiment the full benefit of an unburdened trial. Women have been admitted to the New York County Medical Society, and from that Society to the New York State Medical Society, and at the last meeting of the American Medical Association, the President ruled that women should be regularly registered.

ART. VI.—*Post Partum Hæmorrhage.* By B. F. FORTNER, M. D., Fayetteville, Ark. (Read before the State Medical Society of Arkansas, May 2, 1877.)

Post partum hæmorrhage depends upon absence or insufficiency of uterine contractions, the organ assuming a state of dormancy immediately after the expulsion of its contents, or else perfect contractions are followed by relaxation of the muscular activity. This uterine inactivity most frequently occurs in persons of lax fibre. This condition of laxity may be either congenital or acquired. Of the former type, every physiologist can recall examples; of the latter, old age and child-bearing stand

in a prominent causative relationship. When the depressing influences consequent upon child-bearing and lactation are brought to bear upon a delicate female, the muscular fibres begin at once to lose something of their wonted tonicity. The forces of nutrition being depressed, there results an injurious modification of the plastic energy; nor do the forces controlling uterine hyperplasia furnish an exception to the general rule. The muscular fibres of the uterus, like all analogous structures, either responds in a diminished degree to the special nerve force, or else the nerve centres have suffered vital depression—perhaps both. In order to secure perfect contractions, there must be a normal degree of nervous excitability, of muscular contractility, and lastly, a sufficient stimulus. If either of these elements be absent or insufficient, there results absence or insufficiency of uterine contractions, and as a legitimate sequence non-closure of the vascular channels.

Since function is so inseparably connected with the material and vital integrity of organs, and since all tissues have these properties maintained through the agency of the same all-pervading nutritive force, we may have, by modification of this force, both muscular and nervous insufficiency.

It is well known that a retained portion of placenta often causes hæmorrhage—the retained portion being large enough to keep up a moderate degree of distension; otherwise, the organ in contracting toward a common centre, would bring the walls of the vessels in apposition. The compressibility of the retained portion of the placenta materially facilitates the expansion of the pulsating artery, so that blood is easily driven through these channels under the force of an "excited heart."

Rambotham places among the causes of hæmorrhage intra-uterine coagula. But in the light of the present, it would appear that coagula would hardly form in a properly contracted uterus, and that such coagula have only the power to maintain an already existent distension.

Lingering labors, and the use of instruments, are both charged with causing hæmorrhage. That prolonged labors are in a restricted sense causative is certainly true; but while they favor non-contraction and consequently non-closure of the vessels, which condition means hæmorrhage, it is probable that insuffi-

cient uterine energy frequently underlies and causes both the lingering labor and hæmorrhage; the latter is not a fruit of the former, but both are natural results of one and the same cause. The same principle applies to the use of instruments; the instruments do not cause inertia, but the uterine inertia demands the use of the instruments. Instruments properly used cannot produce such results. It would rather seem that, since inertia frequently comes of exhaustion, the timely use of forceps might prove prophylactic.

Another class of important though remote causes of post partum hæmorrhage, entirely overlooked by authors, so far as I know, are chronic pleural and pericardial effusions, cardiac valvular insufficiency—in short, any physical condition seriously interfering with respiration, either directly or indirectly, as may be done by flexion and consequent contraction of the ascending vena cava at the diaphragm. Whether respiration be impeded by imperfect areation of the blood, as in the case of a regurgitant current or constricted cava; or by reason of a compressed lung, the same effect upon the circulating fluid is induced. The equilibrium of the circulation being disturbed, a venous condition of blood follows—a condition ill-suited to the ordinary purposes of repair, and eminently prejudicial to the rapid tissue genesis involved in pregnancy. The other manifold blood changes incident to these conditions also favor a low grade of tissue formation, thus causing uterine laxity sufficient to give rise to post partum hæmorrhage.

Contrary to the generally accepted doctrine, we shall impute to the arteries the direct source of post partem hæmorrhage. If it be true as taught, that the material sinuses are but tortuous channels, lined with ordinary endangium, corresponding in arrangement with the arteries, then much less contractile force than is present in most cases of hæmorrhage would prove quite sufficient to close them. That bleeding occurs not unfrequently, under considerable contraction, is so universally admitted that an attempt has been made to explain it upon the theory of forcible circulation.

Dr. Gooch states that at times there is little proportion between the degree of contraction and amount of hæmorrhage, and believes that hæmorrhage, under contraction, is attributable to

"the force of the circulation"—the violent action of the blood-vessels overcoming the ordinary closure of their orifices. In this connection it will be remembered that the arterial walls are thick as compared with those of the veins; hence a much greater degree of contractile force from without would be necessary to the closure of the former than the latter. The direction of the blood current is toward and not from the heart in the veins. The solution of the continuity of the circulatory ring occurs at the site of placental attachment; and here it is that the *vis a tergo* tends to pour the blood from the arteries—they being active organs of circulation, while the veins are passive. In severe cases, it is remarked that the blood is scarlet, contrary to what would be expected by the venous theory.

The experiments of Dr. McKinza are corroborative of the idea of arterial source. He took a pregnant bitch near term, anæsthetized her, opened and exposed the womb. Upon separating a portion of the placenta, the blood flowed freely from the divided arteries; at least the blood was of an arterial character, and venous blood, in small quantity, flowed only where the placenta was ruptured. Again, he procured the uterus of a human female, who died because of uterine hæmorrhage during labor, rendered tedious by reason of a malformed pelvis. He inverted the uterus, and "near a fifth of the placenta was found still adherent, and the ramifications of the utero-placental arteries were plainly seen upon the site of the placental attachment, free from anything like coagula or plugs." The vessels upon the cut surface were secured, and defibrinated blood injected, first into one and then into the other hypogastric artery; in both instances blood escaped freely from the torn utero-placental arteries; none escaped from the veins. The force of the injection, as measured by the hæma-dyna-mometer did not exceed that of the heart acting under ordinary circumstances. (*Assoc. Med. Journal*, December, 1853.)

The arterial orifices, then, were not occupied by coagula, nor indeed presented anything indicative of closure, contrary to the formerly accepted opinion that arteries here, as in other situations, are wont to retract within the uterine walls and shut their own mouths by an inturning of their inner and middle coats. These canals, channeled out in the uterine walls and lined with

endangium, are so intimately united with surrounding tissues as to prevent any special retraction, and can have their walls approximated in no other way than by contractions from without.

Dr. Snow Beck states that "in a careful autopsy made after death from intra-uterine injection of perchloride of iron, by the aid of a lens and bright light, numerous white points were seen, which, on being raised upon the point of a fine needle, were found to be broken off extremities of arteries imbedded in the soft tissues of the part. These arteries were easily drawn out to some distance, and a portion of several were cut off for examination under the microscope. Their ends were sharp and slightly ragged; their canals *perfectly* open, and none of them contained any coagula. Moreover, their coats were not surrounded by any cellular tissue, as in other situations, so that they could be neither retracted in their length, nor contracted in their diameter." "The coats of the arteries being thus closely adherent to the surrounding tissues of the uterus, would be prevented from having any independent action, and would be influenced solely by the contraction or relaxation, or other condition of the tissues composing the walls of the uterus." (*Obstet. Jour. Great Britain and Ireland*, vol. 9, page 575.)

If, then, our ideas of cause and source be correct, the therapeutic indication is clear and positive. Mechanical closure is the *sine qua non* of success. If conditions favoring post partum hæmorrhage are known to exist previous to a labor, such should be treated upon general principles. I desire to emphasize the importance of prophylaxis—a subject too little thought of by the profession in these cases. I am sure hæmorrhage might often be anticipated by timely and judicious use of tonics. Many females pass through a weary pregnancy of sickness and suffering, without an attempt at relief, and at last die of post partum hæmorrhage. Both physician and patient often fail to appreciate the necessity for prophylaxis in treatment of this disorder. A history of a previous hæmorrhage, or a condition indicating the possibility of such thing demands, 30 or 40 minutes previous to completion of the second stage of labor, ergot in quantity sufficient to sharply stimulate the uterus; which will expedite the expulsion of the placenta, and anticipate the hæmorrhage. No intelligent accoucheur would fail to clear the uterus of all

coagula or retained portions of placenta, even at the expense of introduction of the hand into the uterus, the stimulation of which often induces firm contraction.

Under the head of central stimuli are ergot, turpentine, oil of errigeron, borax and rue. Of these, ergot is most to be relied upon; the powers of which are greatly enhanced by alternating it with other remedies of its class. It should be taken hourly, in full doses, until very firm contractions are produced. This ergotism will continue for many hours, during which time a full dose—℥iss of turpentine, or oil of errigeron should be given, returning to the ergot again in 12 or 24 hours.

Tardiness of action is a serious objection attaching to all internal remedial agents. Ten minutes may determine the weal or woe of our patient, and yet 30 minutes at least is requisite to secure the full effect of the most prompt and efficient of them. Hypodermic medication must, for the sake of expedition, if for no other reason, command more attention than has been accorded to it in the treatment of this form of hæmorrhage.

Of the peripheral stimuli acting chemically, the perchloride of iron is the most active. Its merits obviously need not be discussed in this paper.

The cold douche, when poured from a height of several feet, is a powerful uterine stimulant. Cold water per vaginam, or ice to the os externum, frequently induces sufficient contractions in mild cases. But in all imminent cases, the hand should be put into the uterine cavity, and firm pressure made upon the most probable site of the placental attachment with the closed fist, at the same time that active external kneading or manipulation is being practised. Ergot should precede and form part of every mode of treatment.

Aortic compression and transfusion are remedies belonging to neither of the above mentioned classes, which are eminently important palliatives, serving the purpose of prolonging life until necessary contractions are induced by art or nature.

These remedies accomplish the same end by a different *modus operandi*. The indication being to maintain free circulation through the brain and other vital organs, each does so by widely different means. Aortic compression not only seeks to husband the vital forces of the system, but by arresting the circulation, it

throws the greater proportion where it is most needed. Transfusion supplies the same vital organs by a process affecting alike the whole system. Aortic compression and mechanical stimulation by the hand in the uterus may be conveniently practised in conjunction, as illustrated by the following case:

Mrs. C., aged 40, of lax fibre, was in labor with her tenth child. Though the contractions were sluggish and rather inefficient, I, for apparently sufficient reasons, did not premise the usual dose of ergot, but permitted the labor to be completed in the usual manner. The secundines came away properly, and the uterus closed naturally. In an hour and a half, I saw the patient and found unmistakable evidences of violent concealed hæmorrhage. I immediately administered f℥ij of fluid ext. ergot. In ten minutes, I introduced the hand into the uterine cavity, when a large coagulum escaped, immediately followed by a gush of blood that defined the situation. I began active friction with the hand in utero, but no contractions came. Administered ℥ss fluid extract ergot, and continued manipulation for a while, but still the blood gurgled away without the slightest contraction of the womb. My patient plead permission to die in peace. In this dire extremity, I remembered Dr. Welche's suggestion of this combined manipulation, and I acted upon it, by pressing the organ firmly into the right inguinal region, upon the right division of the aorta. The hæmorrhage notably diminished at once, so much so that life was sustained until slow but firm contractions announced the safety of the patient.

This case reimpressed me with the importance of premising the use of ergot, and also evinces the utility of this combined manipulation.

Clinical Reports.

Rupture of Uterus at the Posterior Utero-Vaginal Junction—Cæsarian Section—Patient Survives Six Days—Death from Protracted Shock. By T. CHALMERS DOW, M. D., Professor of Gynæcology and Diseases of Children, Nashville Medical College, Tennessee.

On June 15th, 1877, at the instance of Prof. Paul F. Eve, I was called to see Mrs. J. M., living on the Brick Church Pike, five miles from the city. Her family physician, Dr. W. W. T. Crockett, stated in a note that he apprehended rupture of the uterus had occurred. Hastily gathering together some instru-

ments, and accompanied by Professors Duncan Eve and Frank Glen, we reached the house at half-past ten A. M.

Dr. Crockett gave the following history of the patient: She is very low in stature; weight, 116 pounds; depression at pubic arch; good constitution; age, 26 years. Her husband is disproportionately large in every respect. She carried her first child to full term, but it was small and still-born; her second, quite small at birth, and is living; her third was carried to full term, but died in a few days from convulsions caused by the great amount of compression it incurred in passing through a very narrow pelvis. In this labor, there resulted a vesico-vaginal fistula, which was operated on successfully in Jackson, Tenn. Her fourth conception was carried to full term, but the child was very small at birth.

She was taken in labor with her fifth child on the evening of June 14th. She states that "she had gone three weeks over her time." Labor pains all night, vertex presenting, but no descent. About 4 o'clock next morning, she sat up in bed to reach for a cup of water, and suddenly fell back, declaring that something had broken loose, and that her pains had all ceased. She became quiet and easy, but all the symptoms of severe shock were indicated.

On entering the sick chamber of Mrs. M., attention was immediately drawn to her anxious, pallid countenance, lividity of lips, pulse very weak and quick—every evidence of profound shock. An examination revealed the full extent of the injury. Introducing the right index finger *per vaginam*, I found the soft parts greatly tumefied. The anterior lip of uterus was felt; the posterior lip seemed absent, and the edges of a large rent were detected. An examination of the abdominal parietes showed marked protuberances and inequalities; the fundus of the uterus was easily distinguished and presented forwards; it was powerfully contracted to its usual limits succeeding parturition. The fœtus was distinctly felt above the contracted organ, the larger portion of it being above the umbilicus.

As an operation held out the only hope in her case, it was proposed, and consented to at once. She was fortified with brandy, placed on a table near the only window in the room, and Squibb's ether was administered by Dr. Crockett. She passed under the influence of the anæsthetic rapidly. An incision was made in the linea alba, commencing immediately below the umbilicus and carried as far towards the pubes as possible. As soon as the peritoneum was punctured, there was a gush of blood. The incision being found too small (on account of her short stature), was enlarged around and one inch above umbilicus.

Ocular inspection now revealed a large and well-developed male fœtus, with its appendages, in the upper part of abdominal cavity. There was a great amount of blood in the peritoneal cavity, and much clotted. The uterus was firmly contracted, so that the index finger could with difficulty be passed to the fundus. The rent was found to have involved the posterior lip of the uterus in its totality, the tissues fraying out, as it were, and tearing apart from the utero-vaginal junction. Sudden anteversion must have followed this rupture, thus forcibly expelling the fœtus high up in the abdominal cavity. The head of the child bore the imprint of some pressure.

There was no laceration of any of the uterine ligamentous attachments; the anterior utero-vaginal was intact. The fœtus and secundines were carefully removed, and the peritoneal cavity cleansed and sponged as effectually as possible. The uterus was placed *in situ*, no attempt being made to close the rent, it fulfilling so well the indication for drainage through the *cul de sac*, and, in case of recovery, an operation at a future period being suggested. Coaptation of the abdominal incision was made by Dr. Eve, with the silver suture deeply applied. She rallied quickly from the operation, and was replaced in bed. A full opiate was given and ice *ad libitum* allowed. The extreme length of the fœtus was 25½ inches, and, with secundines, weighed about 14 pounds.

At 5 P. M. she was resting quietly.

June 16th, 6 A. M.—Dr. Crockett found patient restless; she had passed a sleepless night, perhaps owing to nurse not giving morphia as directed. Pulse 132; tongue very dry, and thirst great; stomach irritable, not being able to retain ice. Gave one-third of grain of morphia hypodermically.

At 8 A. M., pulse down to 120, and sense of general relief. Ordered aconite and morphia to be kept up during day.

At 5 P. M., the patient feels much better; has had two hours of good sleep since morning; pulse 120; took milk and retained it well. Ordered same remedies through night.

June 17th, 10 A. M.—Patient resting well; passed the night quietly; had about three hours of good, sound sleep during the night; pulse 108; tongue moist; very little thirst; stomach retained nourishment well; feels much better. Ordered same remedies through the day as before.

5 P. M.—Has passed a quiet, easy day; slept some; took nourishment; pulse 108; tongue moist; no thirst; a cloth wet with a weak solution of carbolic acid was laid over abdomen; drainage through *cul-de-sac* was well established.

June 18th, 6 A. M.—Called in great hurry to patient. Pulse

120; tongue dry; great thirst; extreme irritability of stomach; was informed that about 5 A. M., patient's feet and legs grew cold to her knees; cold sweats, lasting half an hour. Reaction began in about an hour, or shortly before my arrival. Ordered aconite to be resumed, and morphia sufficient to quiet any restlessness or pain; brandy and ice freely.

5 P. M.—Patient quiet, suffering no pain; great thirst; pulse 144; tongue very dry; considerable tympanites; does not complain of any pain; has taken iced milk twice since morning. Directed same treatment through night.

June 19th, 7 A. M.—I found patient resting better than last evening; has had a restless night; pulse 120; tongue moist; took nourishment and relished it; not so much tympanites; no pain. Ordered aconite at longer intervals, and morphia, if any pain developed.

June 20th, 8 A. M.—I found patient resting quietly, but much oppression from tympanites; pulse 160—small and thread-like. Ordered free stimulation, morphia and aconite every six hours. Prescribed enemata, but they failed to excite an action.

6 P. M.—Patient greatly depressed; increased tympanites; pulse very rapid—so much so as to make it difficult to count. Ordered an enema every hour, but failed to evacuate the bowels. Gave oil and turpentine, but without effect. Bowels now enormously distended.

Midnight.—Patient very restless; great difficulty in breathing; increase of tympanites; pulse imperceptible; cold perspiration; evidently dying. Died at 6 A. M. of June 21st.

The above are Dr. Crockett's notes during the after treatment of this interesting case. I saw the patient, with Dr. Eve, three days after operation, when she seemed to be doing as well as we might expect—no pain, good spirits, and the most perfect drainage. Saw her the day before her demise, with Prof. J. J. Abernethy, and found her doing apparently well, with the exception of enormous tympanitic distension, which seriously interrupted her breathing. She felt no pain and showed an unusual degree of strength and an active condition of the intellect; yet the Hippocratic countenance, and the thready, frequent pulse (difficult to count), portended early dissolution. The immediate cause of death in the case of this patient must have been protracted shock, as at no time was there developed any sign of peritonitis or blood-poisoning, and she seemed cheerful in anticipation of a speedy convalescence.

A Case of Syphilophobia. By J. Edwin Michael, M. D., Demonstrator of Anatomy in the University of Maryland; one of the Surgeons to the Baltimore Infirmary, Baltimore, Md.

I bring the following case to public notice with a two fold object. In the first place, it is an excellent example of the absurdity of physicians attempting to treat their own cases, especially where there is much feeling involved; and it is also a strong point as opposed to the theories of those wild enthusiasts who hold that the train of symptoms to which we apply the name of constitutional syphilis is due to the administration of mercurial preparations. Examples on the other side—*i. e.*, those who have syphilis having taken no mercury—are numerous enough:

Dr. X., a man of excellent judgment and intelligence under ordinary circumstances, and one who has had no little experience in the study and treatment of venereal diseases, came to me in June, 1875, for advice in regard to his own case. Nine days after a suspicious copulation, the Doctor had noticed that he could feel one of the inguinal glands. On examining the penis very carefully, he observed a small, reddened point on the frænum. Alarmed by this, he searched diligently for induration. On the next day, a slight abrasion was visible, caused, doubtless, by his own manipulations. He was engaged to be married to a young lady to whom he was sincerely devoted, and the state of his feelings, when he imagined he had contracted syphilis, can be better imagined than described. He was thoroughly aroused to a sense of his supposed unhappy condition, and his distorted imagination converted every passing trifle into a symptom of syphilis—every vague pain suggested syphilitic rheumatism; every stray hair from his head *alopecia syphilitica;* every point of *acne vulgaris*, secondary eruptions. In short, he fell into a most melancholy state, and even at one time determined to break off his engagement. He diligently read authorities on the subject, becoming more and more despondent as they seemed to confirm his unhappy fate. The course of treatment to which he subjected himself was as follows: A course of iodide of potassium, gr. xv *ter die*, for three months; May to July, 1874, mass. hydrarg., gr. ij *ter die*, soon increased to gr. iv; July to October, 1874, hydrarg. bichlor., gr. $\frac{1}{12}$th to $\frac{1}{9}$th *ter die*; Oct., 1874, to Jan., 1875, mass. hydrarg., gr. v *per diem;* Jan. 1 to 15, mass hydrarg., gr. ijss *per diem;* Jan. 15 to Feb. 15, no

treatment; Feb. 15 to April 15, mass. hydrarg., gr. v–vj *per diem;* April 15 to June, hydrarg. proto-iodide, gr. ij *per diem.*

Thus it will be seen that for a period of more than a year a severe course of mercurial treatment was persisted in; yet no trouble resulted, save an occasional slight purging from the mass. hydrarg., and a little sponginess of the buccal mucous membrane.

In June, 1875, the patient came to me, and, having given me his history, asked an opinion. After a thorough examination, both physically and as to a description of symptoms (in regard to which latter point the intelligence of the patient aided me much), I unhesitatingly pronounced the opinion that the case was not, and never had been, one of syphilis. I found nothing except an enlarged gland, which had been so from childhood, and a few points of *acne vulgaris*, which could not by any possibility have been contorted into a syphilitic symptom. Upon hearing my opinion of his case, the Doctor threw away his pill box, and has been well and happy ever since.

Fibrous Tumor of the Back Removed – Immense Surface Exposed. By EDWARD M. CAMPBELL, M. D., Abingdon, Va. (Read before the Abingdon Academy of Medicine.)

On *Jan.* 28, 1864, I was called to see Mrs. D., at Taylorsville, Johnson county, Tenn., 28 miles from Abingdon, Va.—my present home. I found her suffering from the weight of a large swelling on the back, extending from the first dorsal to the first lumbar vertebræ. Upon examination, I diagnosed that the enlargement was a fibrous tumor, and the pain was the result of the weight upon her spine.

The tumor was flat and spread sideways over a large surface. It measured, longitudinally over the spine, before removal 18 inches, and 15 inches after removal, in a direct line over the spine. It extended on each side of the spine at its widest part seven inches. In other words, it was fourteen inches wide by fifteen in length. I advised that it be removed, and on February 28th, 1864, aided by my friend, Dr. T. D. Kernan, we proceeded to remove it.

After the patient was thoroughly anæsthetized, we commenced with our incisions, and found the tumor such as had been previously diagnosed. The tumor was nearly cartilaginous in density, and required careful dissection to prevent cutting through the skin. When the skin had been dissected from the tumor, we found the tumor as firmly adherent to the spinous processes. In-

deed, once or twice small portions of the spinous processes had to be removed with the tumor. It took fifty-five minutes to do the dissections and complete the operation. After removal, the tumor weighed eleven and a half pounds. The immense surface exposed was at once covered with the preserved skin, united by sutures and fastened by adhesive strips, and bandages applied over compresses.

I saw the patient again on March 4th, and redressed the wound. There was no tendency to sloughing, and the wound was in a healing condition. In two weeks after the operation she was entirely well, and has remained so to this time.

There are one or two points of interest in this case which I think should attract attention. One is the amount of surface exposed in connection with the weight of the tumor removed. The lady in health weighed 120 pounds; the tumor weighed eleven and a half pounds, *drained of blood;* then one-tenth of her weight was removed. But the more material fact is the amount of surface exposed. I am aware that much larger tumors have been removed—that is, tumors weighing much more, though they were generally fatty tumors of the extremities or back—but I have seen no account of any tumor, the removal of which has exposed so large a surface as in the case here reported. The practical lesson from this case is, that a very large surface may be exposed by a surgical operation with a reasonable hope of the recovery of the patient.

Case of Extra-Uterine Pregnancy—Discharge of the Fœtal Remains per Rectum—Recovery. By L. W. GILLAND, M. D., Delta, La.

I present this case, not for the peculiarity of the pregnancy, but because of its rare mode of termination.

Francis W., colored, æt. 30 years, second pregnancy. On examination, about two months since, and more recently, I found a large, indurated tumor in the left iliac region. On pressure and manipulation, I could easily detect a crepitus, not such, however, as would be elicited from fractured bones.

The woman exhibited to me fœtal remains, including nearly the whole skeleton, among which were all the bones of the cranium, the humeri, the femora, and many of the smaller bones. These, she told me, had passed from the anus with the fæces

during a period of two years or more. These bones I now have in my possession.

I made vaginal and rectal examination, but could not discover the fistula through which these remains must have passed. The uterus was somewhat atrophied, and the functions of menstruation were wanting. There was derangement of the digestive apparatus, and the patient suffered from diarrhœa with offensive discharges.

One of the remarkable features of the case is, the length of time during which the fœtal remains were held *in situ*. As nearly as I could learn, impregnation took place nearly six years ago. There were no unusual symptoms during the ordinary period of gestation; labor pains came on regularly, were protracted, and were then succeeded by uterine inertia, the pains returning occasionally for two or three weeks, after which there was no return. About three years afterwards, the remains of the fœtus began to be passed, the bones coming away from time to time, until nearly the whole skeleton was secured. Others of the small bones may have passed without being discovered.

I adopted an entirely tonic course of treatment, and the woman is able to take moderate exercise.

Correspondence.

British Medical Association.

Mr. Editor: Being present at the British Medical Association meeting in Manchester, I had an excellent opportunity accorded of listening to the learned discussions of the best medical and surgical talent gathered together from England, Ireland and Scotland. There was a great crowd every morning at 9 A. M., filling the spacious chemical lecture room, to listen to the chief address of the day. It would be needless to state that Bishop Bailey's opening sermon was eloquent and scholarly. Prof. Wm. Roberts presented a most admirable essay, every sentence of which was replete with evidences of hours spent in careful study, while the whole represented years of work and patient observation. It was in support of the theory that bacteria and putrefaction cannot take place in fluids to which germs are prevented from gaining access, and establishing the probability of the various zymotic diseases having their origin from spores only. Sir Wm. Jenner's world-wide reputation as a scholar is sufficient

evidence of an able address as President of the Medical Section. Spencer Wells, in his graceful, polished manner, gave a glowing account of the progress of surgery within the life time of the Association. Very many other valuable papers were read in the various sections. But the great interest of the meeting was centered in the demonstrations of Prof. Lewis A. Sayre, of New York, in applying the apparatus for cure and relief in cases of Potts' disease and lateral curvature of the spine.

Dr. Sayre has been in England for a month, and his progress in entering the hearts of the British profession, from the most eminent surgeon to the humblest house assistant, is marvelous, and cannot but be gratifying to the hundreds of friends at home, who are proud of his unselfish devotion to the profession, and his untiring energy in instructing every one of his co-workers so that they may accomplish the same results as himself.

Previous to the meeting at Manchester, he had, at Guys, St. Thomas, and other hospitals, applied the dressing to some sixty cases with astonishing results. Some of these same patients had been unable to walk without support, and some even could not stand. But within forty-eight hours, one delicate little child was able to run about and play. Sir James Paget remarked that through the zeal of Prof. Sayre to advance a noble profession, he had accomplished that by which the sufferings of the hunch-back of to-day were ended, and had blotted out the deformity for the future generations.

The lecture of Dr. Sayre, in his own original manner, would, at times, bring smiles to the audience at his dry wit, or tears by his pathetic tales of distress, and wild, prolonged applause at his bursts of eloquence. For three hours, the room was filled to suffocation with an intensely interested audience, and when the material for practical demonstrations was exhausted, and the meeting closed, cheer after cheer went up in one grand chorus as a slight testimonial of the appreciation for the words of instruction that had dropped from his lips. A vote of thanks was passed. Dr. Meacham, a hunch-back, rose to second the motion, saying he was a living witness of the improper treatment of former days; for thirty years he had been blistered, afterwards rubbed with sulphate of copper, then sprinkled with caustic potash, and treated with appliances till he had suffered the tortures

of the damned. He stated that now after a hard days work, he would come home tired out and find immediate rest by just placing his thumb under his chin and raising it a little, demonstrating the correctness of the Dr. Sayre's treatment. Had he forty years ago been treated by this proper method, he might to-day appear among men free from deformity and three inches taller. His story was so gentle, and full of pathos, that every eye was wet, and the tears coursed down the cheeks of the good Doctor, as he rose to respond.

Dr. Sayre has been invited to lecture in every prominent hospital in England, but as he must return home soon, he cannot accept all the invitations.

In closing, let me add, that the skill of the father has descended to his son, Dr. L. H. Sayre, who proved himself a valuable assistant.

Yours truly,

S. M. DIDAMA, M. D., of *Syracuse, N. Y.*

Liverpool, Eng., Aug. 14, 1877.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

The Comparative Action of Quinia, Cinchona and Cinchonidia.—MM. Laborde and Dupuis recently made a report on the physiological action of these drugs to the Societé de Biologie. These experiments were made upon dogs, and the results are published in *La Tribune Médicale* for the 17th of June last. Since cinchonidia is now being so largely used in place of quinia, these experiments will prove interesting to the readers of the *Monthly*.

The amounts of the different drugs used were about 15 grains of quinine and about 12 grains of each of the other articles—cinchonine and cinchonidine.

The dog who received a hypodermic injection of 15 grains of quinine, at the end of half an hour was in a stupefied condition, and there was a very marked loss of general sensibility, and soon afterwards there was complete anæsthesia. The second dog, who had received the hypodermic injection of 12 grains of cin-

chonine, after certain prodromic symptoms, which consisted in restlessness and a wild expression, and also some spasmodic twitches, such as are produced by electricity, suddenly "uttered a cry," followed by two or three other sounds of a similar character, and then fell to the ground and had a generalized tonic convulsion, attended by foaming at the mouth and the involuntary discharge of urine. Upon this followed a period marked by clonic convulsions and stertorous breathing. M. Laborde says there could not have been a more distinctly marked attack of epilepsy. These attacks passed off in a short time, to be repeated at intervals for some hours, and it was noteworthy that they were readily brought on by peripheral excitation.

The third dog, who had received about 12 grains of cinchonidine by hypodermic injection, after a prodromic period marked by trembling very similar to that of paralysis agitans, was taken with an epileptic attack similar in all respects to the one we have just described, except that it was a little less violent.

The result of these experiments show the propriety of caution when giving large doses of cinchona and cinchonida in place of quinine.

The Use of Nitrite of Amyl in Diseases of the Ear.—Dr. J. Michael, of Hamburg (*Archiv. für Augen und Ohreuh*), draws attention to the use of nitrite of amyl in certain chronic affections of the middle ear and the labyrinth, especially as a remedy for the subjective sounds which are such a frequent and annoying symptom in these cases. He used this mode of treatment in twenty-seven cases. In nineteen there was great improvement, so far as the "buzzing" was concerned, and in four of these there was at the same time a considerable improvement in the hearing. From one to five drops were inhaled at each sitting. In nearly all these cases the roaring in the ears was made worse at first by the amyl, but this soon gave place to a decided diminution in the intensity of this unpleasant symptom. The improvement usually lasted for some hours or days, and in one case it was present at the end of three months.

Urbantschitz states that very beneficial results have been obtained from the use of nitrite of amyl in earache; he found also, in one case, a very decided and lasting improvement in the subjective sounds to which we have previously alluded. In the case of a young man who had suffered from roaring and buzzing in his ears for many months, in consequence of large doses of quinine, the inhalation of two drops of nitrite of amyl caused the complete disappearance of these subjective sounds in the left ear, and very great improvement at the same time in the right.

The Action of Eserin.—Leon Wecker (*Klin. Mon. Bl. für*

Augenh., XV) claims that eserin has an antiseptic action, and that it furthermore irritates the smooth muscular fibres, and thus influences diapedesis. He recommends dropping a one per cent. solution of eserin in the eye every hour or half hour: 1. In cases of corneal abscess (with a tendency to ulcerate), after the contents of the abscess shall have been evacuated; 2 In ulcers having a tendency to extend after the cornea has been punctured; and 3. In suppurating wounds after cataract operations. When the edges of the wound become cloudy, Wecker opens it up in its entire extent by a stilet, and drops in, every half hour, a one per cent. solution of eserin. In addition to this, he recommends frequent washing with a warm, weak solution of carbolic acid (one part to a thousand of water), in order to insure its complete cleansing.

Massage.—Two interesting articles have very recently appeared on this subject—one by Dr. Körner, in the *Deut. Zeitschr. für Prakt. Medizin;* the other by Dr. Bruberger, in the *Deut. Militärarztliche Zeitschrift.*

Dr. Körner's mode of manipulation is as follows:—The part of the body to be subjected to massage is to be first shaved, if it is hairy, and then well oiled. It is then rubbed with both hands, first from the periphery towards the centre. If thought advisable, the surface of the limbs or body above the affected part may first be rubbed in this way, and when the veins here are well emptied, the diseased tissues themselves may be subjected to similar manipulation. As a rule, in acute cases this treatment is at first quite painful, but the pain becomes less and less at each sitting. The stroking of the skin should be at first very gentle, and the amount of force used gradually increased. In a little while circular rubbing is to be practised with one hand, while the stroking from periphery to centre is continued with the other.

In chronic cases, kneading the affected surface is also to be practised, in order to stimulate the absorbents and hasten the removal of any new formation. Passive movements should also be made, and after a time the patient should follow these by active movements of the limbs. Dr. Körner usually practises these manipulations for ten minutes every morning and evening. In affections of the joints of the lower limbs, the patients are directed to walk about for an hour during the intervals of treatment.

Bruberger advises massage for the following conditions: In all serous, bloody or inflammatory effusions in the skin, the connective tissue, the muscles and the sheaths of tendons; also infiltrations and exudations from contusions, sprains, &c.; in all

inflammatory thickening or new formations; in cicatrices or contractions in the different tissues, from whatever cause. It is also of service in affections of the skin attended by infiltration of the corium in rheumatic swellings, adhesions of the tendons, fasciæ and intermuscular structures, as a result of traumatic lesions. He recommends its use also in nearly all acute and chronic affections of the joints, such as the so-called "inactivity" of the synovial membrane after the limbs have been kept at rest for some time, periarticular hyperplasia, serous, sero-fibrinous and sanguinolent effusions in membranous anchylosis, fungous synovitis, &c. In affections of glands, such as inflammation of the female breast and of other glands, it has proved highly serviceable, and it has also given good results in the after-treatment of fractures and luxations. It has been used also with good effect in the treatment of varicose veins, inflammatory thickening of the walls of the vessels; and, finally, it has been found highly serviceable in certain neuralgic conditions, in muscular rheumatism, in sciatica, in various neuroses of the joints, and even in infantile paralysis.

Prognosis and Treatment of Writers' Cramp.—From an article on this subject by M. Gallard, which has recently appeared in *Le Progrès Médical*, we extract the following:

Functional impotence, which M. G. thinks a much more appropriate name than writer's cramp, is not a serious affection, so far as the *life* of the individual is concerned, but it is of the gravest import with reference to the use of the arm for the purpose of writing, it being, M. G. says, "almost absolutely incurable." There are, however, he admits, some cases of cure. Whenever there is cramp attended by pain, narcotics and antispasmodics are indicated, both internally and applied locally. Stromeyer has once performed tenotomy of the long flexor of the thumb, with success; but the operation has been performed since without the slightest benefit. Cazenave has succeeded in relieving the painful contraction in one case by applying a bandage tightly around the arm. Electricity has been employed, according to M. G., without much success. He states that Duchenne had only two recoveries in fifty cases in which this remedy was used. In these two cases the functional impotence was rather on the order of paralysis than cramp. Faradization was employed by Duchenne, but M. G. proposes to use the constant current, and thinks the best results are to be obtained from this.

[His opinions on this subject are in entire accord with those of Erb (*Krankyeiten der peripherea Cerebro-Spinalen Nerven*), and Hammond (*Diseases of the Nervous System*). A distinguished physician of this State has cured one case very promptly by

faradization. The Translator has at this time two cases under treatment, one of which has been almost entirely cured by the constant electrical current from twelve cells. In the other case but partial relief has thus far been obtained—twelve applications of the battery having been made. M. G. states that the seat of the affection has thus far escaped "all anatomical localization." Hammond classes it under diseases of the nerve cells. In some cases there is an undoubted neuritis of the brachial plexus, and there can be but little doubt that the "functional impotence" of the muscles concerned in writing may be produced by a variety of causes. All writers agree in considering complete rest of prime importance.]

Translation from the French. By J. Spotswood Wellford, M. D., Professor of Materia Medica and Therapeutics, Med. College of Va., Richmond.

Injection of Air into the Cellular Tissue to aid in Removal of Tumors. *L'Abeille Medicale* of July 2d, 1877, contains the following from the *Revista Medico-Quirugica de Buenos Aires.*

To avoid the difficulties incident to the removal of tumors in consequence of their position or their size, M. Montes de Oca conceived the idea of employing the insufflation of air as a means of isolation. He introduces a trocar under the skin, in the neighborhood of the tumor; then by adapting a pump to the canula, he injects a quantity of air, sufficient to distend the cellular tissue which surrounds the tumor. Sometimes it is necessary to use a number of punctures and injections when the tumor is adherent and voluminous. It is advisable to compress the tissues adjacent to the tumor, to prevent the air from going beyond the desired point, thereby producing a prompt insufflation, and, at the same time, limited to the sphere of the tumor.

After this preliminary operation, the skin being divided, the enucleation is generally made with great facility and extreme rapidity, by tearing out the tumor with the finger or the handle of the bistoury. For two years Dr. Montes de Oca has applied this procedure in his clinique at the general hospital with excellent results, thereby avoiding dissections which are often difficult in certain delicate regions and in deep tissues.

We cite among other cases a patient who had a tumor about the size of the fist, in the left lateral region of the neck; the tumor was irregular, hard and adherent to the skin. After having produced insufflation, Dr. Oca made an elliptical incision

of ten centimetres (nearly four inches), and was able to remove the tumor by the aid of the finger.

In another very interesting case, who had an adenoid tumor in the axillary region, a large number of ganglions were removed after a previous insufflation, although with less facility than in the previous instances. The insignificance of the hæmorrhage was remarkable, notwithstanding the extent of the wound and the exposure of the vessels and of the brachial plexus, the tissues being hardly wet with the blood.

The extirpation of a carcinomatous breast by MM. Argerich and Oca was made by the same proceeding and without difficulty. We might still further multiply the examples, but do not deem it necessary. From the foregoing it is easy to imagine what advantages we may secure in certain operations, by an insufflation of air into the cellular tissue.

Analyses, Selections, &c.

Dialysed Iron (*Ferrum Dyalysatum*) is attracting so much attention throughout the medical world, and its future is so promising, that a notice of it will be of interest to most of our readers. We compile this notice from several paragraphic notes in various medical journals and from circulars issued by manufacturing chemists, etc.

Dialysed iron was discovered by John M. Ordway, and was first described by him in *Silliman's Journal* in 1857, although by some Graham is said to be entitled to the credit. Ordway's description was, in the main, confirmed by Béchamp in 1859, (*Annales de Chimie et de Physique*, 3rd series, p. 296); afterwards by Phillips, and again, in 1868, by Jeannel.

The London chemists, Messrs. Squire, state that they introduced dialysed iron as long ago as 1869; it has also been imported both of French and German origin. More recently it has been introduced into Austria under the name of *catalytic iron*.

According to a circular recently issued by Messrs. John Wyeth & Bros., manufacturing chemists, &c., of Philadelphia, who have done so much to introduce the article to the American profession, and whose preparation is to be preferred even to the imported, we are informed that in the manufacture of dialysed iron we avail ourselves of two known principles. The first is connected with the remarkable property possessed by the chlorides in general, of combining with the oxides to form oxychlo-

rides, which are usually soluble, and in which the proportion of oxide is very large. As regards iron, particularly, one equivalent of its perchloride may under suitable conditions combine with thirty or more of the oxide, giving a soluble oxychloride, the formula of which would be $Fe_2\ Cl_6\ Fe^2\ O_3$. To get rid of the hydrochloric acid, and obviate the usual inconveniences of ferruginous preparations, we take advantage of the second principle—that of the unequal diffusibility of hydrochloric acid and peroxide of iron, the latter belonging to the class of colloid bodies; and by means of the dialyser we completely separate this hydrochloric acid; so that, as a final result, we have the thirty equivalents of soluble peroxide of iron contained in a very small volume of water.

When this operation has been conducted with care, the dialysed iron obtained is simply a neutral concentrated solution of the oxychloride of iron (ferric oxychloride, $Fe''' Cl\ 23\ Fe''' O$) holding in combination the higher oxide of iron (ferric oxide or sesquichloride). It does not contain a particle of ferric hydrate, as some have affirmed. Its chemical arrangement is probably best expressed by the formula $Fe_2\ Cl_6\ 23\ Fe_2''' O_3$. It should be added, however, that chemists as yet are not fully agreed as to the exact formula. Each fluid ounce of the solution contains twenty-four grains of iron.

Dialysed iron is a permanent, neutral, inodorous liquid, of a deep red color, but transparent in thin layers. It has none of the styptic taste so common and disagreeable in ferruginous preparations. Some preparations—especially those of foreign manufacture—contain only $3\frac{1}{2}$ or 4 per cent. of iron, whereas it should contain 5 per cent. A 5-per cent. solution should yield 3 grains of dry residue when 60 grains of it are carefully evaporated to complete dryness. The preparations manufactured in this country are both better in quality and cheaper than the imported. The solution should not be allowed to freeze, as this has the effect of thickening it. But if by evaporation, freezing, or otherwise, it becomes too thick or gelatinous, the addition of a few drops of *distilled* water will bring the solution to the proper consistence; but water containing salts precipitates with it—even the Schuylkill water will sometimes precipitate it. With arsenical salts, dialysed iron acts with great rapidity—even more quickly than the freshest preparation of the precipitated oxide of iron which has heretofore been held to be the surest antidote for arsenical poisons introduced into the stomach. Preparations having a sweet taste will very generally be found to be simply the saccharate or glycerate of iron, and entirely different from dialysed iron.

Becquerel states that, "tested by chemical reagents, this article is found to be immediately precipitated in the form of brown flocculi by a very small quantity of sulphuric acid, by alkalies and by many salts; but it is not precipitated by nitric, acetic, or muriatic acid. This latter property precludes the risk of its activity being interfered with by the chlorides in the digestive canal."

Dialysed iron is distinguished from the salts of iron by not giving rise to a blood-red color on the addition of an alkaline sulpho-cyanide, nor to a blue precipitate with ferro-cyanide of potassium. It should not become cloudy if boiled. When agitated with one part of alcohol and two parts of the stronger ether, the ether layer should not be made yellow.

Dialysed iron may be administered for months together for all the purposes for which ferruginous preparations are usually exhibited. Becquerel says of it—and his observations are confirmed by physicians of eminence everywhere—that "it produces neither heartburn, diarrhœa, constipation, eructations, nor, in short, any gastric disturbance; and, which is a matter of much importance, it *never blackens the teeth*." It is especially in anæmia, chlorosis, palpitations, chronic diarrhœa, gastralgia, dysmenorrhœa, etc., etc., that its use is indicated. It is certainly tolerated well by some persons who do not bear other forms of iron. Dr. S. Weir Mitchell, in a recent clinical lecture reported in the *Medical and Surgical Reporter*, especially recommended it in a case of extreme exhaustion coming on in a professional pedestrian two weeks after a walking feat of fifty miles in ten hours.

But its *specific* virtue is as an antidote for poisoning by arsenic. Dr. H. C. Wood, in the *Medical Times*, July 21, 1877, as already quoted, says, "Judging from its behavior in the test tube, it is even a better antidote to the poison than is the freshest precipitated oxide. Experiments upon animals are, however, necessary before a final judgment can be reached upon this point." When dialysed iron is taken into the stomach, gelatinous ferric hydrate is produced. It also possesses the great advantage of being always ready for immediate use, and, possessing the virtues of iron in general, will hereafter be found in every drug-store and in the saddle-bag of every country physician.

The dose of dialysed iron, for tonic purposes, is from five to twenty drops four or five times daily. It may be taken, however, without inconvenience in doses several times larger than those stated, but to no advantage, as only a certain amount can be absorbed into the system. From numerous experiments recently made, it would appear that this amount is not more than from fifty to eighty drops per day. Dr. S. Weir Mitchell, how-

ever (*loc. cit.*), uses it "in far larger doses, and has given it freely by the drachm or the half ounce [per day] without its causing annoyance." Of course, in cases of arsenical poisoning, an excessive dose should be given at once.

Dialysed iron is best administered by itself upon sugar, or mixed with some simple syrup which is free from an acid, as an acid admixture converts the preparation into a salt of iron. It may also be conveniently given in wine, or in coffee, etc. Being, however, without odor, and imparting merely the faintest astringent taste—if not altogether tasteless—to the palate, and being compatible with syrup and alcohol, and communicating no taste to any suitable vehicle, it is easy to construct formulæ for elixirs, syrups, etc. A glycerite of dialysed iron is said to be an elegant preparation.

The manufactures in this country furnish with each bottle a "drop counter," which greatly facilitates the administration of the solution. This consists of a small glass tube, nozzle-pointed, capped by a rubber bulb. "The rubber portion is compressed with the fingers, and the tube is introduced into the liquid; the pressure is then relaxed, when the liquid passes up into the instrument, which is thus charged, and may be removed. By repeated gentle pressure on the rubber, the liquid is made to issue, drop by drop, until the requisite number is counted." The instrument should not be washed with ordinary water, for reasons already stated, but should be cleaned, after using, with a clean rag of soft linen.

Reflex Paralysis due to Irritation Caused by Congenital Phimosis. Dr. E. T. Sabal, of Jacksonville, Fla., contributes a valuable paper to the literature of this subject (*Proceedings of the Florida Medical Association*, Sessions 1875 and 1876), recently made prominent by the writings of Dr. Lewis A. Sayre, of New York. Dr. Sabal adds the reports of four cases which have occurred in his practice.

Congenital phimosis is a more common malformation than is generally supposed. In 1849, Dr. M. D. Delaney, of the United States Navy, published a paper based upon his experience in examining recruits. In one examination of 117 men, he found 12 subjects of the malformation. Of these, ten were impotent All had attempted sexual union, but only two succeeded, according to their own statements. The feeling of amativeness in these men was so weak that, they said, they had essayed connection with women rather through a sense of curiosity than passion; and yet, Dr. D. had scarcely ever seen twelve men with more ample muscular development in all parts save the organs of gen-

eration. The penis was invariably small—about the size of that of a boy of twelve years. The coronal glans was also very small, and the prepucial opening but little larger in diameter than the meatus. The testes, from having been but rarely excited, corresponded in size with the penis. The ages of these twelve men were from 18 years to 28. Dr. Delaney believed the impotence was manifestly owing to phimosis, and concluded that the only remedy was circumcision.

In 1852, M. Fleury wrote a paper on the *Consequences of Congenital Phimosis*, in which he arrived at the following conclusions:

"1. Congenital phimosis possesses a pathogenetic importance that has been almost entirely overlooked.

"2. This is exhibited in three orders of phenomena to which it gives rise. These are (*a*) accidents relating to the genital organs. The penis and testes frequently small, and the mucous membrane of the glans delicate, red, and morbidly sensitive. Coition is painful, and ejaculation incomplete, difficult, and often attended with severe perineal pain. Exhausting erections and nocturnal pollutions are of frequent occurrence, as are urethral discharges, even after the purest connection. The genital sense is sometimes so excited as to give rise to almost continual erection, immoderate venereal desire, masturbation, and involuntary emission; while in other cases it is, so to say, extinct, a more or less complete anaphrodisia prevailing. (*b*) Phenomena referable to the urinary organs These are, frequent desire to pass urine, pain at the orifice of the urethra, and other symptoms which are usually attributed to a vesical neuralgia, disease of the prostate, stone or some other disease of these organs. (*c*) Various disturbances of the nervous system, presenting a great analogy to those observed in women suffering from uterine disease or displacement of the uterus, such as gastralgia, hypochondriasis, and hysteriform attacks—the true cause of which symptoms is always overlooked.

"3. Excision of the prepuce is the only remedial means. In twenty-three out of twenty-seven cases in which this was resorted to, success was complete, the four others being lost sight of soon after the operation.

"4. Whatever form of treatment may be had recourse to, these cases cannot be relieved until the vicious conformation has been remedied."

The paper by Dr. Lewis A. Sayre, on *Partial Paralysis, &c.* (in the *Trans. Amer. Med. Assn.*, 1870), was accompanied by reports of several cases. This paper antedates the one by Mr. Barwell, of London, who, in his lectures on Infantile Paralysis,

gave a very vivid description of the peculiar form of partial paralysis, of which, some of Dr. Sayre's cases were illustrative. Dr. Barwell stated the fact had never before been observed; but he afterwards became acquainted with the historical facts, and gracefully yielded his claim of priority to Dr. Sayre. An examination of a complete file of *Braithwaite's Retrospect*, from 1840 to 1877, shows no allusion to anything which embodies Dr. Sayre's views.

We have space to append only brief notes of Dr. Sabal's four cases as reported by himself:

Case 1. Apparently healthy man, age 22 years; in 1871, consulted Dr. Sabal, stating that, as far back as he could remember, he had suffered from incontinence of urine. For the past five years, he had been annoyed by erotic dreams and nocturnal pollutions. He was contemplating matrimony, but feared he was unable to accomplish the sexual act, except very imperfectly. No relief followed the use of medicines. An examination revealed congenital phimosis, with redundant prepuce. Without giving any anæsthetic, except a pretty good drink of brandy, with an opiate, Dr. Sabal circumcised him; after-treatment consisted in rest in bed, cold water dressings and an anodyne. Marked speedy amelioration of symptoms occurred. The following night, he slept well, and from that time appeared perfectly well. Last summer (1876) the patient was perfectly well and vigorous, and stated that the sexual act was accomplished with pleasurable emotion, such as he never experienced before the operation.

Case 2. Male infant, 1870, shortly after birth, became very fretful and would scream out as if in great pain. Assafœtida and anodynes were repeatedly given to relieve the sufferer from "colic." When the baby was a year old, symptoms were noticed of vesical irritation—intermittent flow with pain. When three years old, the Doctor's attention was called to the great difficulty in passing water, with persistent attacks of priapism. Examination showed congenital phimosis. Chloroform was administered by Dr. R. P. Daniel, and Dr. Sabal performed circumcision. After-treatment consisted in the use of cold water dressing, anodynes and rest. Relieved in a few days and is now a large, healthy boy.

Case 3. Dec. 12, 1876. Boy, nearly three years old, has never slept more than two or three consecutive hours at a time, is restless, fretful, cries out and jerks in his sleep. The mother said that just before and during urination, especially during the day, the child had sometimes severe crying spells, and seemed to be in pain. The urine would collect in the folds of the skin and

form a round ball, and would then be discharged spasmodically. When the child tries to walk there is noticed a decided loss of co-ordinating power (partial paralysis). The child had congenital phimosis and adherent prepuce, and the prepucial opening was very minute. Dr. Huan administered chloroform, and Dr. Sabal circumcised the child. Behind the corona was a layer of hardened smegma, which was removed, and the parts were washed in a weak solution of persulphate of iron, which soon put a stop to all hæmorrhage. After-treatment, cold water dressing, anodynes, rest. In four days the mother returned home with her child, and two weeks after the operation, the father wrote Dr. Sabal that "my boy is fully recovered."

Case 4. March, 1877. Man, aged 18 years, apparently in excellent health; weighs 148 pounds. No particular pain or discomfort; incontinence of urine during youth, and occasionally now. Little or no sexual desire—has never had what he calls "satisfactory sexual intercourse;" has never masturbated. Examination revealed congenital phimosis; no adhesions; penis and testes small As the patient entertained a horror of the knife, Dr. Sabal resorted first to the method of dilatation, recommended by Dr. G. De G. Griffith (*Brit. Med. Jour.*, October 7, 1876. pg. 464). Inject some oil under the foreskin, and gradually dilate the prepucial aperture by means of forceps, something like the ordinary uterine forceps. This should be repeated every other day till relieved. The pain is said to be very trifling. Under chloroform, the dilatation may be rapidly accomplished. In Dr. Sabal's case, however, after a few sittings, the process of dilatation by the forceps was attended with considerable pain, and the patient became impatient and requested an operation. Dr. Sabal performed circumcision April 15th, and on June 15th (when the Doctor last saw him), he was perfectly well; sexual desire had developed, and his *morale* was excellent.

[Prof. R. T. Coleman, of this city, at a meeting of the Richmond Academy of Medicine, Oct. 21, 1875 (*Va. Med. Monthly*, Dec., 1875, pg. 675), reported a case in which he inserted a sponge tent between the prepuce and glans of a child, to relieve the contraction of phimosis. In two days, the foreskin could be easily retracted. A number of similar cases might be referred to as already reported in the journals, and others which have been verbally reported to us. Since Dr. Coleman's report, in the case of a negro child, about a year old, who had reflex spasmodic attacks, evidently due to contracted prepuce, and whose parents begged that circumcision should not be performed, the Editor obtained a good result, within a week's time, by the use of slippery-elm bougies or tents (cut about the size of so many

wax matches). At first, one was gradually inserted between the prepuce and glans. The mother was instructed that, whenever the child manifested desire to pass water, the tent should then be removed, and another introduced as soon as he had urinated. As the dilatation of the prepucial orifice proceeded, say on the second day, two flattened tents may be used—one on one side of the glans, and another on the other side. About the third day, or as soon as three flattened tents can be inserted, introduce the third above the glans. The ends of the three bougies, as they project a half inch or an inch in front of the penis, form the apex of an imperfect cone—the other ends of the slippery-elm bark bougies, of course, being between the glans and the foreskin. If this simple procedure proves sufficient, it seems preferable to the disfigurement that results from slitting up the foreskin, on the dorsum, or even the more general operation of circumcision.—*Editor*].

Dr. Sabal, after reporting his cases, suggested that all cases of congenital phimosis in children, aged from one to three years, be operated upon, with the view of preserving the health and cleanliness of the parts; as a preventive in a certain degree of venereal disease; and as a removal of the cause of impotency and reflex irritations which develop in after life.

In the adult, the operation practised by Ricord, will answer the purpose. In very young children, circumcision, as practised by the Jews, is all that will be required. In all cases, the glans must be well uncovered, and any organized secretions removed. [Cosmoline or] vaseline or cold water dressing will soon heal the parts.

Dr. Sabal adds the titles and references of a few journal articles on the subject.

Veratrum Viride in Puerperal Convulsions.—From the numerous reports which have from time to time been made of the efficacy of veratrum in puerperal convulsions, we are strongly of the opinion that this remedy should be more frequently used than it is. We propose simply reporting here a few recently recorded cases which seem to give to veratrum viride a higher rank than it has heretofore occupied, in the treatment of that fearful affection termed puerperal convulsions.

Dr. P. F. Whitehead, of Vicksburg, reports the following cases in the *Transactions of the Mississippi State Medical Association*, 1877: He was called on March 17, 1876, at 2 P. M., to a Mrs. J., whose confinement was close at hand. He was apprehensive of convulsions because of excessive œdema of the feet, limbs, face and vulva. In addition, she had characteristic head pains—

one, as if a tight band was being drawn around the head, pressing on the brow; the other, as if a nail was being driven into the vertex. He immediately bled her until both pains were relieved. At 6 P. M., less severe pains had returned. He left, to call in half an hour, and bleed again. On being hastily recalled in a few moments after leaving, he found the patient in frightful convulsions, which continued in spite of all his efforts to prevent them. Labor came on; the patient became worse—unconscious all the time. In consultation with Dr. R. O'Leary, at 3 A. M. of the 18th, she was delivered with forceps of a living child; but the convulsions grew worse. At 10 A. M., when the case was nearly despaired of, Dr. W. injected hypodermically *eight* drops of Norwood's tincture. In eight minutes, the patient was pulseless—in collapse. But three drachms of whiskey, used hypodermically, promptly restored the pulse; respiration improved; and she had no other convulsions; convalescence rapid.

On the evening of September 12, Dr. Whitehead was called to see Mrs. D. who was happily delivered in two or three hours of a living child, with no untoward symptom. Two years before, he had treated her for puerperal convulsions after delivery. She was apprehensive that she would suffer in that way again, but the absence of all premonitory symptoms sustained the Doctor in reassuring the patient. At 2 A. M., the Doctor was called to find her in convulsions. She had two convulsions before veratrum was received. Five drops of Norwood's tincture, hypodermically administered, rendered her pulseless in eight minutes. Whiskey used hypodermically, restored the pulse, and she had no other convulsion.

At the meeting of the Southern Michigan Medical Association, July 11, 1876 (*Detroit Review Med. and Pharm., Sept.* 1876), Dr. Southworth, of Monroe, said he divided puerperal convulsions into three classes, viz: apoplectic, hysterical and anæmic. The first he would treat with twenty-drop doses of Norwood's tincture of veratrum; the second with bromide of potassium and musk; the third, with phosphorus and strychnia. In ten years practice, he has treated on an average three cases per year. [A remarkably unfortunate experience.—*Ed*].

Dr. Crosby, of Albion, had also used the veratrum treatment with success; had combined morphia with veratrum with good results. His cases recovered, with one exception, and in that, the patient had forty convulsions. In another case, Dr. Crosby bled, gave veratrum and calomel; found the os would admit his index finger. A fœtus of seven pounds was delivered spontaneously. Stupor continued forty-eight hours, and four weeks elapsed before the patient recognized any member of her family.

In the discussion which ensued, particularly on the dosage, some of the members stated that they had exhibited Norwood's tincture in *drachm* doses in such cases.

In the *Transactions American Medical Association*, 1876, pg. 240, Dr. J. H. H. Burge, of New York, says Drs. Corry and Bunker, of the Kings' County Medical Society, have had remarkable success in the use of veratrum viride for the cure of convulsions. Dr. Bunker particularly reports one case in which a patient was brought under his notice who had been entirely insensible for hours. In that case he made hypodermic injection, five drops of the fluid extract of veratrum viride, and gradually increased and repeated the injections frequently until, within 24 hours, about one ounce [?] of veratrum viride was used, and the patient rallied. Dr. Corry reported several cases where he used veratrum viride [the preparation is not stated, EDITOR] in doses of from five to thirty drops, at varying intervals of from 20 minutes to two or three hours—being governed entirely by the character and frequency of the pulse. The experience of these physicians is that when they had strongly marked depressing symptoms, their patients have recovered quickly; they have had vomiting and purging, but the patients have rallied quickly. As to the dose, Dr. Corry is governed entirely by the character and frequency of the pulse. If the pulse should be full and rapid, and if it arises above 80, give the dose fearlessly.

Dr. D. A. Langhorne, of Lynchburg, Va., remarked that no cases are recorded anywhere with the bare exception of the one by Dr. Parker, in which death has resulted from veratrum viride. [See also *Stillé's Therapeutics and Mat. Med.*, vol. ii, pg. 297.—ED.] With the caution to give a little whiskey, there is not the slightest danger in using the drug. He has given it in drachm doses, but the number of cases is not large enough to draw a conclusion. He has "never used Norwood's tincture." He hopes no one will think he uses this sort of standard dose, even of United States tincture.

Dr. Robert Battey, of Rome, Ga., has no personal experience in the use of veratrum viride in puerperal eclampsia, but the practice is followed in Georgia, and highly approved of there. The dose rarely exceeds seven or eight drops. The drug is *not* devoid of danger, as remarked by some speakers to-day. He has known of one case of death, that of a brother practitioner, directly traceable to doses of veratrum viride. But he has heard of no other death from the use of this drug.

Dr. T. D. Fitch, of Illinois, has been in the habit of using Norwood's tincture of veratrum viride, according to Norwood's directions, and it has never failed him in a single instance of pu-

erperal eclampsia. He commences with five or six drops, increasing by one drop every two or three hours, until the effect is felt, and then decreases the dose.

In the *Buffalo Medical and Surgical Journal*, March, 1877, Dr. Fordyce Barker, of New York City, remarks that as a preventive where there are premonitions, if the circulation is hurried, control it with veratrum viride so as to reduce the frequency of the pulse to sixty per minute; and if convulsions develop without prior treatment, even then use veratrum. In a case which he reports, chloroform had been used prior to his visit, but the convulsions recurred as soon as the anæsthetic was removed. Pulse 120; advised veratrum viride [preparation not stated] ten drops; repeat in thirty minutes, in reduced doses until vomiting ensued or pulse was reduced to sixty. Convulsions were controlled with the second dose, and the third dose reduced pulse to 48. Continue veratrum as soon as pulse increases above 60. In another case, chloroform was given, which controlled the severity of the convulsions. Prompt artificial delivery was effected. After delivery, veratrum viride was given, and she had no more convulsions.

Dr. Ira E. Oatman, of Sacramento, reports the case of a primipara (*Trans. Med. Soc. Calif.*, 1877, pg. 154) who had puerperal convulsions which resisted all treatment—anæsthetics, forceps delivery, stimulating and antispasmodic enemata, compound spirits of ether, potassium bromide, chloral and cold to head. Venesection was impracticable, as the veins were too small and concealed. Nothing seemed to do good—indeed, the patient was said to be dying. Dr. O. then administered per rectum twenty drops of the officinal tincture, with chloral and compound spirits of ether, and gave fifteen drops more of the veratrum in ten minutes. In thirty minutes more, the convulsions ceased, and did not return; and the patient recovered.

These reports the Editor has hastily noted from exchanges upon his table, and are sufficient to lead to something like scientific investigation of the subject. Numerous other reports have from time to time fallen under his eye, which, were it necessary, might be collected to show the great value of the agent in puerperal convulsions. Of course what has here been compiled is not to be understood as favoring sole reliance on veratrum, but as an adjuvant to other treatment; although from some of the Western States come most favorable reports of the value of veratrum viride alone. Some of the latest and best works on Therapeutics do not allude to the use of veratrum viride for puerperal convulsions.

Ingrowing Toe-Nail.—Dr. A. H. Agard, of Oakland, California (in *Trans. Med. Society California*, for 1876 and 1877, pg. 45, *et seq*), contributes a very complete paper on this subject. It is of more interest since the trouble is frequently met with, poorly understood and maltreated, because so little attention is paid to it by text books of the present day. Druitt gives it a paragraph; Fergusson does not mention it; Erichsen has only a short paragraph on it; Gross devotes a page to it; Hamilton makes no allusion to it in his work; Gosselin, however, devotes nine pages to it in his *Clinical Lectures on Surgery;* Holmes, in his *Treatise on Surgery*, gives about twenty lines to it.

The toe-nail grows from a matrix, which lies in a fold of the skin near its base; in a large majority of cases, it comes forward with a thickened, recurved margin at either side, which lies easily in a groove in the soft parts that run along either side from the matrix to the end of the digit. A very notable difference occurs in the thickness of the nails in different persons. It is very largely the rule that a thick, robust nail (finger or toe), is provided with recurved margins, imbedded in deep sulci on the sides of the digits. Dr. A. believes this conformation of the toe and nail determines a predisposition to the disease in question; and he has satisfied himself that the disease is often hereditary.

Anything may be an exciting cause that forces the incurved margin of the nail to so impinge upon the skin lining the bottom of the groove as to bruise, irritate or inflame the parts. The nail that is not viciously grown, but is entirely normal to the individual, in this way becomes the offending member, and the soft tissue somewhere along the groove, the suffering part. Hence, the trouble may be produced in a toe with the predispositions noted, either by forcing the margin of the nail too firmly into the bottom of the sulcus, or by pressing the bottom of the groove up against the nail. These conditions are often associated in the production of the trouble.

The most fruitful exciting cause is the habit of wedging the foot into a narrow funnel-shaped stocking toe, as is done every time such a stocking is pushed into a boot or shoe. The next most frequent exciting cause is, wearing a very loose boot, with a cuneiform shape at the toe. Especially if it has a high heel, this tends to press the toes together at every step. Another exciting cause is wearing a boot that is too narrow for the foot.

The sulcus on the outer side of the great toe most often suffers. Any or all of the exciting causes noted, operate to produce this result. The lateral pressure from these causes operate first upon the inner anterior angle of the nail of the great toe—this being a prominent point. The effect is to push the nail outward, and

to sink the outer margin deeper into its groove. This continued for some time in the adolescent (it is in youth that the disease is contracted), causes the nail to assume a permanently fixed position in the direction given. The opposing pressure from the outside of the foot after being transmitted through the toe, presses the second toe against the inside of the big toe in such a way as to force the bottom of its outside nail groove up against the margin of the nail. Thus all the exciting causes operate in both directions to give the pressure in the bottom of the sulcus, on the outer side of the great toe, necessary to produce the trouble.

A curious and important point connected with the cause of ingrowing toe-nail is this: In walking—notably in running—just at the last of each step, nearly the whole weight of the body is thrown upon the well padded end of the great toe. This is more emphatically so with the Caucasian, who "toes out" when he walks or runs. The Indian, on the other hand, throws himself forward in his loping gait, with a spring from all the toes, and thus "toes in." In the femur of an Indian, the angle which the head of the bone makes with the plane of its articular surface at the knee, is very much greater than in the femur of the white man. Now place the femurs upon the table so as to rest on their condyles at the lower end, and upon their shafts at the other; the head of the white man's femur rises but little above the surface of the table, while that of the Indian cocks up, giving a very obtuse angle with the surface of the table. Now place the head of each bone in its acetabulum, attach the leg and foot, and it is at once seen why the Indian lopes with his toes, while the white man runs with his big toe.

Not only is the weight of the body largely sustained by the under part of the big toe, near the end, but the last act in completing the step culminates in forcibly putting the flexor muscles of this toe into action. This effort presses the toe, still nearer the end, firmly against the ground, which, being unyielding, throws the body forward and gives elasticity to the gait. Thus the great toe gives the "spring of the step" with "out-toers."

The soft parts at the end of the great toe, in the last act of a step, when the foot is uncovered, are pushed forward—spread out laterally, and jut up at the end and sides of the nail. But when the lateral expansion of the soft parts is denied, as by a shoe, the expansion finds room, of course, in the direction of least resistance, which is at the front of the nail, and notably just anterior to the point where the end of the second toe is pressed against the outside of the great toe. This causes, with each step, an upthrust of normal tissue, which in time becomes permanent, and so interrupts the nail groove anteriorly as to con-

vert it into a sort of pocket or pouch; the outer angle of the nail is consequently pressed into the bottom of this pocket. The nail and the surrounding tissues are thus forced into abnormal relations, and if they be allowed so to continue, disease of structure, with all its phenomena, must follow.

One having the predisposition given, who wears a narrow-toed stocking, with the foot pressed into a fashionable, narrow-toed and high heeled boot, will first suffer discomfort in the nail groove. This discomfort is often at first simply an itching or tingling, deep down in the toe, not unlike that experienced in a corn. Walking, especially when first starting, soon becomes painful. Now and then, severe twinges of pain are felt as though a sharp instrument was being thrust through the toe. Some morning, after a long walk the day before, a very uncomfortable soreness is felt as the foot is being dressed Swelling and some heat are then discovered along the outer border and at the end of the toe. A bath and a little rest give partial relief for the time. Probably then the party accidentally stumps his toe, or some one treads upon it, when the margin or the angle lacerate the integument. An ulcer follows; the nail becomes "a thorn in the flesh," bruising and lacerating it, and giving acute pain with every step. Some one tells the sufferer to scrape the nail thin on top, cut it close in the middle and allow the corners to grow out long, to make the nail grow narrower, as though the growth of a nail was influenced by treating the free end! He is also told to use a loose shoe; to apply a decoction of oak bark; to pucker up the end of the toe; to apply burnt alum to cut off the "proud flesh;" to apply beef's gall, or skunk's oil to soften the nail. And yet the corners of the nail continue to grow, the inner one against the stocking and the boot, pushing the nail deeper and deeper over into the sore groove. The outer corner grows into the inflamed, ulcerated pocket at the end of the groove; the tissues thicken; the pocket becomes deeper and deeper, and life is rendered miserable. With the increasing pressure upon the integument lining the groove, there is set up in the cuticle an effort to protect the true skin beneath. Epidermic cells are thrown out profusely and left to harden into a protective covering. These, as they are cast off, are held in place by the margin of the nail. in such firm manner, that no ordinary bathing will disengage them. They multiply until they form a thick, hard pad under the nail; and, becoming saturated with the excretions, they form an offensive, irritating mass, which still further injures the soft tissues beneath. The reddened integument beneath this mass has much of the peculiar tenderness that belongs to a true corn. Often the lateral pressure upon the toes

so forces the second toe upon the margin of the great toe as to fold the inner border of the matrix under, partially upon itself. When this condition becomes permanent, the deformed matrix sends forward a viciously formed nail, with a true inversion of the border.

In the *first* stage of this trouble, cut the nail short, *trim both corners well back*, and keep the front rasped thin; avoid stockings with narrow toes; select boots with low heels and ample room for the toes, but fitting the instep snugly.

But if the patient comes, as he generally does, too late to be benefited by these simple injunctions—if ulceration has taken place from pressure of the border of the nail in the bottom of the groove, and the soft parts are inflamed and indurated, the indication then is to perfectly relieve the bottom of the groove and the toe-nail pocket from the unhealthy pressure of the margin of the nail.

Two plans are proposed; one is temporizing, the other, radical. With the former object, two methods are mentioned. Removal of the nail entire gives relief until a new nail develops, when the trouble returns. Again, the free border of the nail may be trimmed away, back to near the base, so as to relieve the pressure for the time, and if well done, so as to leave no spicula or sharp edges to come forward and soon wound the flesh again, will give comfort; but this operation must be repeated every two or three months. Dr. A. prefers this to the former temporizing method.

Three methods for *radical* cure deserve mention. 1. Remove entire nail with its matrix. The objection to this is that it leaves the top of the toe unprotected. 2. If merely the margin of the nail with the matrix be removed, the nail will remain narrower, and the normal recurved margin will never be renewed. 3. If we remove the soft parts along the border of the toe so as to take away the groove and the obstruction to the growth of the angle of the nail, we as effectually cure the disease as when we remove the nail. This is a less objectionable operation than either of the above two. Care should be taken that the nail groove is effectually ablated, and especially that the upthrust of indurated tissue anterior to the outer angle is removed. As a rule, the operation will confine the patient to his lounge for a few days, but some patients walk around the day after. Dr. A. has never known of a relapse after this operation.

In cases where the deformed matrix sends forward a malformed, recurved margin, remove the margin of the nail and the matrix from which it grows. It may be proper in rare cases to combine two operations—remove the margin of the nail and the side of the toe.

There is no need for general anæsthesia in making these operations. The application to the toe of a little snow, pounded ice, or a freezing mixture will render the operation almost painless.

In some cases. where the engorgement of the tissues is great, from being long or severely irritated, the hæmorrhage will be out of all proportion to the size of the wound, but no harm can follow.

Dr. A. dresses the wound with salicylic acid in substance, using the dry powder, and orders the dressings to be kept wet for a few hours with cold water. Profuse granulations should be repressed, but they do not come up under the use of salicylic acid.

The Opium-eater.—The confirmed opium-eater in the East seldom lives beyond the age of forty, and may be recognized at a glance by his trembling steps and curved spine, his sunken, glassy eyes and sallow, withered features. The muscles, too, of his neck and fingers often become contracted. Yet incurring even this penalty will enable him to indulge his vice only for a certain length of time. Unlike the healthy enjoyment which we derive from our appetite of hunger, and which nature herself renews periodically, the enjoyment of the opium-eater gradually diminishes as his system becomes habituated to the drug. From time to time he must increase the quantity which he takes, but at length no increase will produce any effect. Under these circumstances he has recourse to a dangerous expedient; he mixes a small quantity of corrosive sublimate with the opium, the influence of which is thus for a time renewed. Then these means also fail; when the victim must bear the miserable condition to which he is reduced, until probably, sooner or later, he sinks into the grave. On the excitable temperament of the Malays and Javanese, a strong dose of opium causes a state of frantic fury amounting almost to madness, and this often ends in that homicidal mania which has been called "running amuck;" in other words, in the individual attacking with his crease or dagger every one whom he meets, so that it becomes necessary to shoot him down with as little compunction as we do a mad dog. In Java, opium is not allowed to be sold except in an adulterated form, the risk of these evil coneequences being thus in some measure lessened.—*Pop. Sci. Monthly.*

Iodoform Topically for Otitis Media Catarrhalis.—Dr. M. J. e Rossett, of Wilmington, N. C., calls attention (*Maryland Med. Jour.*, Sept., 1877) to the topical use of iodoform in catarrhal inflammation of the tympanum and Eustachian tube, particularly where there is perforation or loss of the tympanic mem-

brane. In many instances its effect has been little short of marvelous, and in all well marked. Even a case of nineteen years standing was speedily cured as to the discharges, and greatly benefited as to audition. The ears are cleansed in the usual way with a stream of tepid water, and dried with pledgets of cotton. Iodoform is then introduced, by a Ranchfuss' tube, or by means of a cotton mop on a staff, in sufficient quantities to cover thickly the entire tympanum. Repeat this two or three times a week, always cleansing in advance. The modus operandi is obvious. Iodoform is a disinfectant, a dessicant, prevents the diapedesis of white corpuscles, and promotes the activity of the absorbent vessels.

Book Notices, &c.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. von Ziemssen, Professor of Clinical Medicine in Munich, Bavaria. New York: Wm. Wood & Co. 1874, 1875, 1876 and 1877.

There is not a reader of medical journals in America that has not heard of this great work. The completed *Cyclopædia* will consist of fifteen large volumes of 700 or 800 pages each, and is sold for $75—that is, $5 a volume, payable on delivery. One volume is published every three months, which makes it easy to the purchaser, and makes it profitable also to the subscriber, as he can easily read and study one volume satisfactorily by the time that the succeeding volume is issued. The letter-press is beautiful and the type large—always in itself a recommendation to a useful work. The translations from the German are well done by competent writers and medical authors in this country.

Nothing can supply the place of such a work—it is so comprehensive in its scope and so full of detail. As the editor of the American edition, Dr. Albert H. Buck, of New York city, suggests in his Preface, here we have a series of treatises written by men who are skilled in the different departments of medicine in which they are selected to write, and the volumes are published in such a form as to make, when completed, a compendium of reference. "The ordinary text-books do not supply this want, and the busy practitioner cannot afford to spend either time or money upon the scores of monographs which are constantly being published."

To accommodate the wishes of many parties, this American edition has not been issued exactly in a serial order. Volumes I,

II, III, IV, V, VI, VII, X, XI, XII and XV have been published; volumes VIII, IX, XIII and XIV are yet to be issued.

Our space does not permit of a review. Indeed, we can scarcely give the full titles of each volume. Simply as a specimen of the completeness of the entire work, it may be stated that in Volumes I and II, which are given up to *Acute Infectious Diseases*, nearly 200 pages of Volume I are devoted to a consideration of typhoid fever, by Prof. Liebermeister, of Tübingen. Volume III is taken up with *Chronic Infectious Diseases*, such as syphilis, glanders, hydrophobia, etc.

Volumes IV and V consider *Diseases of the Respiratory Organs.*

Volume VI is devoted to *Diseases of the Circulatory System.*

Volume VII, to *Diseases of the Chylopœtic System.*

Volume X, to *Diseases of the Female Sexual Organs.*

Volumes XI and XII, to *Diseases of the Nervous System.*

Volume XV, to *Diseases of the Kidneys.*

There is no publication in the field of medicine that we can or do so unreservedly commend to the practitioner of physic. True, we do not find many references to the numerous and valuable contributions to medical science and practice by American authors, especially in the therapeutical portions; and herein the work is not altogether what we might wish it to be. But when one passes his eye over the long lists of authorities quoted by the several writers, he is impressed by the diligence and perseverance and the abundance of authority for the propositions set forth.

Many individual practitioners are pecuniarily unable to purchase this entire series of fifteen volumes, and earlier advertisements of the publishers stated that single volumes would not be sold. Yet this *Cyclopœdia* is so valuable to every medical community that some means should be devised to secure it. We would therefore suggest that every county or town medical society should make a special tax upon its members sufficient in the total to secure this work. Such a purchase may form the neucleus of a valuable library. Indeed, if the means did not in the future justify an enlargement of the library, this completed *Cyclopœdia* in itself would form a magnificent library on the *Practice of Medicine.* The suggestion we here make is worthy of consideration.

We shall note more in detail the contents of the volumes yet to be published as they appear.

We should add that a very perfect index is appended to each volume—a thing of immense value to any book that is worth reading.

The Practitioner's Reference Book. By RICHARD J. DUNGLISON, M. D. Philadelphia: Lindsay & Blakiston, 1877. 8 vo. Pp. 341.

This excellent work is designed to impart "information of a purely practical character" which is contained in various works and journals. It meets, in our opinion, the hope of the author as "an indispensable companion" for every-day consultation.

A glance at the table of contents will better express the scope of the volume than anything short of an examination of the book itself. The Hippocratic oath comes first. The chapter on "general information for the practitioner" gives the weights and measures of the U. S. Pharmacopœia and of the metrical system, their relation to each other, etc. Then come tables of the solubility of medicines in various mentrua, abbreviations in common use, comparison of thermometrical scales, etc. Doses of medicines, pharmacopœial groups simplified for ready reference, incompatibilities, the modern treatment of diseases, selected prescriptions, obstetric memoranda, brief rules for clinical examination of urine, poisons and antidotes, etc., etc., make up the third chapter. The fourth section takes up dietetic rules and precepts. And the last section shows in detail how to conduct post-mortem examinations. In short, the work contains *multum in parvo*, and is in reality a valuable handy-book. A good index helps the owner to make ready reference to the subject he wishes to examine.

Editorial.

Notices of the Transactions of the Medical Society of Virginia. As no other society as yet has undertaken to publish its Transactions in the same manner as the Virginia Society, and as it is a pleasure to see what others think of the plan, &c., it may be of interest to note extracts from a few of our exchanges.

The *Boston Medical and Surgical Journal*, March 29, 1877, says, "The Medical Society of Virginia has acted wisely in incorporating its Transactions with the January number of the *Virginia Medical Monthly*. * * * This is a step in the right direction."

The New York *Sanitarian*, May, says: * * * "The report of the Committee on Hygiene and Public Health, by Dr. J. L. Cabell, is one of the best summaries of the subject hitherto made in this country. * * * Nothing can better exemplify the wisdom of the Society in publishing its whole Transactions

in the *Virginia Medical Monthly* (for January), than the report of Professor Cabell. We sincerely trust that the example of the Medical Society of Virginia, in adopting means for the circulation of its Transactions, may be followed. The volume—bound up for members of the Society—will be all the more valuable for the satisfaction the members will have taken in having first given the fruits of their labor to the profession, instead of having confined them to the membership of the Society only."

The West Va. Medical Student, January, 1876, says: "There is wisdom in this plan of publication of Transactions. By it, the papers submitted at the annual meetings obtain a more extensive reading than could be secured by their presentation in separate volumes."

The St. Louis Clinical Record, Feb., 1877, says: "We find this valuable volume of Transactions bound up with the January number of the *Virginia Medical Monthly*, and cannot refrain from an expression of our appreciation of the wisdom of the Society in adopting this plan of giving its work to the reading medical public. In fact, it may be said without fear of contradiction, that any other mode of publication is a sheer waste of money."

The Canadian Journal of Medical Science, March, 1877, says of the Transactions: "They contain, besides addresses by the President, Dr. Cunningham and Dr. McDonald, able papers by the chairmen of eight committees, drafted to report on the advances made in the various branches of medicine. A paper on "Aspiration," by Dr. Hooper, and the proceedings of the annual meeting, complete a volume that is highly creditable to the medical men of Virginia, who show zeal and co-operation worthy of our imitation."

The Cincinnati *Clinic*, Feb. 24, says: "This volume comes to us bound in with that excellent periodical, *The Virginia Medical Monthly*. * * * These "Transactions" are highly creditable to the Society. The address of the President is well conceived, dignified in tone, appropriate in the topics selected, and well written. The address of Dr. McDonald, intended for a mixed audience, is entitled "The Doctor." Under a vein of pleasantry, the various accomplishments, duties, and responsibilities of the physician are excellently depicted.

A capital feature of this valume is the reports, which represents, more or less, fully the most important recent contributions to medicine. There are reports on the "advances" in chemistry, pharmacy, therapeutics, surgery, the practice of medicine, and in hygiene and public health. We have shown our appreciation of the excellence of the work done, by making some selections from these reports for *The Clinic*."

The Philadelphia Medical and Surgical Reporter, March 10, says: "The reports are characterized by marked thoroughness, extensive collation of authorities, and careful presentation."

The February number of the *Nashville Journal of Medicine and Surgery*, says: "The Proceedings of this year are especially full and interesting, and contain many reports of considerable interest."

Restricted space forbids further extracts.

Sale vs. the Louisville Medical College.—We have been *officially requested* to make the following note from the July number of the *Chicago Medical Journal and Examiner:*

"Our readers who have noticed a report of this suit in the June number of this periodical, may also hear *alteram partem*. Here is the account, as published over Dr. E. S. Gaillard's signature, in the *Richmond and Louisville Medical Journal:*

"In September last, Mr. Sale, a medical student and the plaintiff in this suit, entered the college mentioned. He paid his fees. A few weeks subsequently he was offered (with others) free tuition in a Louisville Medical Institution. This offer was a part of the sworn testimony of the plaintiff. He accepted it, and requested a return of his money. This request was, of course, not granted. He then asked for his tickets. He was told that this College never gave its tickets (the evidence of attendance upon a course of lectures) until the last month of the course. Had the tickets been given there would have been no suit, but they were withheld, and the suit invited. The plea in this suit was failure to comply with promises made. In the garbled version of the magistrate's decision published in the *Courier Journal*, and sent to the Medical Press everywhere, and to the alumni of the Louisville Medical College, it is admitted that this plea could not be, and had not been, sustained by the evidence. The so-called "judgment" of the magistrate was given on the ground that the present Faculty were not legally elected.

"The Book of Minutes of the Proceedings of the Board of Trustees shows that the members of the Faculty were not only legally elected by the present Board, but that one of the last acts of the old Board was to elect them (with one exception) before adjournment. It may be asked why was not this book produced and such a "judgment" prevented. The answer is simple: It was in possession of the persecuted Secretary of the Board of Trustees, Dr. B. M. Wible, who was ill and soon after died, and was found after his death, and after the so-called "judgment" had been rendered, and copies of it forced into a

paper (which never publishes the petty business of a magistrate's court), and actively disseminated for purposes too evident to require indication."

The Atlantic Monthly, published by Messrs. H. O. Houghton & Co., Cambridge, Mass., is a most excellent literary and popular journal.

The Hospital College of Medicine, Louisville, Ky., has undoubtedly established the best system of medical education of any Clinical College in the West. With unsurpassed clinical advantages, besides eighteen clinics per week, the student is daily *required* to examine and *prescribe* for patients, thus securing a thorough practical training. After all, this is what we want with doctors—to be practical in their views. We have seen—every physician knows some graduate of a respectable school who does not even know practically how to bleed or to write an original prescription that is worthy to be sent to the drug store. This Hospital College of Medicine is the only institution in America that *requires* a practical, clinical examination for graduation, and as such should be handsomely sustained.

The American Public Health Associaton will convene in Chicago, Tuesday, September 23d, 1877. The Executive Committee has recommended that the leading discourses, papers and discussions shall be arranged under the following Divisions of Subjects:

1. Sanitary Topography and the Systematic Drainage and Sewerage of Cities and Villages.—Other Problems of Public Health.

II. Sanitary Control and Extermination of the Contagia of Typhoid (Enteric) Fever, Scarlatina, Small-Pox, etc.—Other Problems of Domestic Health.

III. Expert Testimony and the Pursuit of Exact Scientific Researches in Public Health Service.

Contributions are already promised upon the following topics, which are published simply to indicate the subjects upon which the discussions will occur:

(1) Discourse by the President, on the sanitary Topography of Chicago, and the Artificial Remedies of Natural Disadvantages. (2) Report on the Proposed Sanitary Survey of the United States. (3) Problems, old and new, in the Sanitary Drainage and Sewerage of Chicago and other Western Cities. (4) Sanitary Geography of Phthisis Pulmonalis and other Pulmonary Diseases. (5) Problems of Sanitary Inspection, Safe-keeping and Transportation of Food Supplies—Animal and Vegetable.

(6) Sanitary Lessons of the Great Fire in Chicago. (7) "Stamping Out" Scarlatina and the Extinguishing of Zymotic Disease. (8) Sanitary Observations and Preventive Measures in regard to Diphtheria. (9) A Review of the Teachings of Twenty-two years' records of Mortality from Croup, Diphtheria and Scarlatina in a City. (10) Miasmata of Dwellings and Dwelling-grounds. (11) Family Health and the Relations of Heredity, Habit and Hygiene to it. (12) Entailments of Ebriety in Individuals and Families. (13) Practical Method for securing Complete and Authentic Records of the Causes of Death throughout the United States. (14) Sources and Propagation of Trichina, with reference to Sanitary Measures. (15) Better Hygienic Care of Sailors and other Watermen, upon the Coastwise and Inland Waters. (16) Sanitary Safety in Railway Travelling. (17) Report on Expert Testimony. (18) Hygiene in the Prevention of Insanity. (19) Sanitary and Economical Importance of the best Surgical and Medical Treatment of the Needy Poor. (20) Tests and Supervision of Milk-supplies of Large Cities. (21) Health in Education, as viewed in each Grade of the Schools. (22) Report on Enteric (Typhoid) Fever as observed in Western Vermont. (23) Preliminary Outlines of the new Points of Enumeration and Inquiry which the Interests of the Public Health require in the Tenth National Census. (24) Available Methods of Promulgating Sanitary Knowledge and Authorized Information in regard to Vital Statistics and Prevalent Diseases. (25) Judicial and other Aids of Law in Public Health Service. (26) Present State of Exact Knowledge of the Causation and Prevention of Destructive Diseases which most harm mankind.

Members are requested to communicate at once to the Secretary, Dr. Elisha Harris, New York City, the titles of any contributions to be made.

Messrs. John Wyeth & Brother, of Philadelphia, will accept our thanks for samples of compressed pills kindly forwarded. Although we have but recently begun the use of these compressed powders, we must confess a preference for them over the ready made, manufactured pills, for reasons set forth in Dr. Greene's article in our last number. This firm, it will also be remembered, deserve most of the credit of introducing *Dialyzed Iron* to the American profession. We have elsewhere in this number made an analysis of some published reports regarding this excellent preparation of iron.

Dr. J. Marion Sims sailed from New York on Saturday, August 25th, on a steamer of the White Star Line, on his European trip. He will return early in November.

Mr. David Heston, proprietor of the United States Label Printing Establishment, Frankford, Philadelphia, Pa., has furnished us with a stamped bank check-book, with which we are very much pleased. As a specimen of the style of his work and printing, it is excellent. His facilities for printing all kinds of physicians papers and blanks are unsurpassed, and his terms are moderate. We refer the reader very cheerfully to his advertisement in this number.

Sir James Y. Simpson was a baker's boy, and was so poor that he took short-hand reports at night in order to earn the fees for his college course. After graduation, his poverty compelled him to seek for a small parochial appointment on the banks of the Clyde. He failed in securing this, and with greater disappointment than he ever afterwards experienced, he returned to Edinburgh.—*Toledo Med. & Surg. Jour.*, Aug., 1877.

The Medical Society of Virginia will convene in the Library Hall, city of Petersburg, Va., at 7½ P. M., Tuesday, October 23d, 1877. About the middle of this month, the Secretary will issue a circular announcement. All delegates from other Societies, and others who expect to attend, are requested to inform the Recording Secretary (the editor of this journal) of the fact.

Dr. Edward Warren, a prominent American Physician of Paris (we learn from *Galignani's Messenger*, of July 9, 1877), has just been created a Knight of the Order of Isabel, the Catholic, as a recognition of the professional skill displayed by him in the successful treatment of some Spanish personages of high position.

The New Orleans Medical and Surgical Journal.—This sterling representative Southern medical periodical has made another advance, beginning July, 1877. It will be hereafter published as an 80-page *monthly*, which is an addition of 60 pages to the annual volume, *without* increase of subscription price, $5 a year. Dr. S. M. Bemiss, undoubtedly one of the very best of medical journal editors anywhere, has associated with him Drs. W. H. Watkins and G. K. Pratt as joint *editors and proprietors*, to whom all communications should be addressed, corner Baronne and Common streets, New Orleans, La.

Dr. I. D. Crothers has resigned his position at Binghampton, New York, to remove to Hartford, Conn., to take charge of the Walnut Hill Inebriate Asylum, to be opened October 1st, 1877. All articles and exchanges intended for the *Quarterly Journal of Inebriety*, should be hereafter addressed to Dr. Crothers, at Hartford, Conn.

Dr. B. G. McPhail, late Acting Post Surgeon, &c., U. S. Army, has retired from the army and settled in Salt Lake City, Utah, where he will enter upon the practice of medicine. Dr. McPhail is recognized by all as one of our most valued correspondents—his articles being all marked by careful and accurate study. May he reap that abundant success to which his abilities entitle him.

The American Association for the Cure of Inebriates will hold its eighth annual meeting at Chicago, Ill., September 12, 1877. Important papers will be read, and a large attendance is specially desired.

The Richmond Academy of Medicine Proceedings have not been reported for some time because nothing of professional interest has occurred. For instance, the equivalent of three whole evenings has been given to discussing in which hall the Academy shall meet.

A Special Offer for *new* Subscribers to the *Monthly* is to be found in the advertising department of this number.

Obituary Record.

Dr. A. B. Crosby, late Professor of Surgery at Dartmouth, N. H., and of Anatomy in the Bellevue Hospital Medical College, New York, and formerly in the Long Island Hospital Medical College, died in Hanover, N. H., August 9, 1877, after two days illness. The lesion distinctly found, on autopsy, was with his kidneys.

Dr. Wm Leroy Stevens, House Surgeon to St. Peter's Hospital in Brooklyn, died in Brooklyn June 24, 1877, from the effects of a dissecting wound received June 15. Age 22 years. He was a native of Richmond, Va., and a graduate of medicine from the University of Virginia, class 1876.

Dr. Nettleton H. Payne died in Hannibal, Mo., July 27th, aged 42 years. This accomplished gentleman, skillful physician and earnest Christian was our friend, knit to our heart by no common bond. His death bereaves us indeed, sunders another of the few ties which bind us to earth, and makes Heaven more real and nearer. With his sorrowing widow and kindred we mingle our tears that we shall see his face no more, but we rejoice with them that he has entered into rest.—*St. Louis Presbyterian.*

Hunter McGuire M. D.

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Original Communications.

ART. I.—*Biographical Sketch of Dr. Hunter McGuire.* By OTIS FREDERICK MANSON, M.D., Professor of Physiology and Pathology, Med. College of Virginia. Richmond, Va.

The life and services of this distinguished Southern surgeon deserve more than a passing notice. Associated as closely and conspicuously as it was possible for a surgeon to be with the greatest war ever waged in America; following the standard of the most brilliant military genius developed in the struggle; and aiding with all the resources of his art that intrepid brigade whose name has become immortal—the fame of its surgeon is inseparably united to that of the heroic band that stood "like a stonewall" in the face of assailing hosts.

Hunter McGuire was born in the town of Winchester, Va., on the 11th day of October, 1835, and was graduated at Winchester Medical College in 1855. He is the son of the late Dr. Hugh H. McGuire, an eminent surgeon and physician, by whom his scientific studies were directed. Fortunate was it for the student that he possessed such a father—one so capable of aiding in the development of his mind, and of guiding the young surgeon's hand. Soon after his graduation, Dr. McGuire continued his studies in Philadelphia, and returning to Virginia, was graduated at the Medical College of Virginia. He returned to Winchester and practised his profession in connection with his father.

He was soon afterwards appointed Professor of Anatomy in the Winchester Medical College. At the commencement of the war between the Southern and Northern States, Dr. McGuire volunteered in Company F, Second Virginia Regiment. He marched with his regiment to Harper's Ferry in April, 1861, but was soon after commissioned surgeon in the Virginia State Forces, and in May was appointed Medical Director of the Army of the Shenandoah, then under the command of Gen. T. J. Jackson. Afterwards, when Gen. Jackson was relieved of this command, and had organized the 1st Virginia Brigade (the future Stonewall Brigade), he requested that Surgeon McGuire should be assigned to him as Brigade Surgeon. He continued to serve as Chief Surgeon of Jackson's command until the fall of the great soldier—ministering assiduously to his beloved leader in his last moments.

We may here remark that, although sometimes high positions may have been occupied in the Confederate service by incapable persons, yet this could never be said truly of those serving under the eagle-eye of Stonewall Jackson, who possessed, not only the talent to contrive and capacity to perform great deeds, but also the equally important attribute of true genius, viz., the judgment to select those competent to assist him in their execution.

It was, therefore, a great honor in itself to have served satisfactorily on the staff of such a commander; but a higher meed of praise than this belongs to the subject of this notice. He possessed his entire confidence, his warm friendship, and received his highest commendation. The sword presented by Jackson to his surgeon could only have been bestowed on one possessed of indomitable energy, transcendent skill and unflinching fidelity.

After the death of Gen. Jackson, Surgeon McGuire served as Chief Surgeon of the 2d Corps of the Army of Northern Virginia, under Lieut. Gen. Ewell, and afterwards as Medical Director of the Army of the Valley with Lieut. Gen. Early, until the surrender at Appomattox.

In May, 1862, at the battle of Winchester, Va., Surgeon McGuire inaugurated the plan of releasing captured medical officers. Eight Federal surgeons were set free upon the simple condition that they would endeavor to procure the release of the same num-

ber of Confederate surgeons. Afterwards General Jackson himself approved of this action. A few weeks after this, all of the medical officers who had been confined by both parties as prisoners of war were released and returned to their respective commands. Although this plan of exchanging medical officers as non-combatants was interrupted by some disagreement between the Commissioners for the Exchange of Prisoners, yet Dr. McGuire continued to release surgeons whenever it was in his power. As late as February, 1865, he liberated the Medical Inspector of Gen. Sheridan's army. When Surgeon McGuire was himself captured at Waynesboro', in March, 1865, Gen. Sheridan showed his appreciation of Surgeon McGuire's action by immediately ordering his liberation.

Surgeon McGuire was the first to organize Reserve Corps Hospitals in the Confederacy (in the spring of 1862, in the Valley campaign). About the same time he succeeded in perfecting the "Ambulance Corps." Four men were detailed from each company to assist its wounded from the field to the hospitals in the rear. These men wore conspicuous badges, and were selected for their courage, etc., no one else during a battle being permitted to leave the ranks for this purpose.

It is almost needless to add that Surgeon McGuire always received the hearty co-operation of Gen. Jackson in his efforts to perfect the Medical Department in the field. In all reports of battles by the Generals commanding the forces with which he served, he was highly complimented for his zeal and ability. It was his good fortune to enjoy the personal friendship, not only of Gen. Jackson, but of Generals Lee, Early and Ewell, all of whom he attended when sick or wounded.

The war being ended, Dr. McGuire soon after removed to Richmond, having been appointed to fill the chair of Surgery in the Medical College of Virginia, made vacant by the death of Dr. Charles Bell Gibson. In his new home, he rapidly acquired an extensive practice, both medical and surgical. His remarkable successes in lithotomy, lithotrity, ovariotomy, etc., have placed him in the first rank of civil surgeons. As a teacher, he is fluent, lucid and impressive, and as a writer has contributed many instructive and interesting articles to Northern and Southern journals.

The skill and talents of Dr. McGuire have been recognized in a flattering manner in all sections of our country. Among the positions bestowed upon him may be mentioned that of President of the Richmond Academy of Medicine, President of the Association of Medical Officers of the Confederate Army and Navy, and one of the Vice-Presidents of the International Medical Congress. These honors are the rewards of talent, industry, skill and high aspiration. "He won them well, and may he wear them long."

ART. II.—*Observations on Puerperal Convulsions.* By HENRY T. BAHNSON, M. D., Salem, N. C. (Read before the Medical Society of North Carolina, 1877, and requested for publication in the *Monthly* by the Editor.)

Amongst less than two hundred births in the past eight years, it has been my misfortune to witness fourteen cases of puerperal convulsions. Five of them I saw in consultation.

One patient, in the seventh month of pregnancy, miscarried, had convulsions, and recovered. One in the eighth month recovered from eclampsia without miscarriage, to die of a renewed onset five weeks later. Eleven were attacked by convulsions at the end of gestation—five before and during the first stage of labor. One died without apparent dilatation of the os uteri; five during the second stage; one at the termination, and one eight weeks after parturition. With the exception of the last, the patients were primiparæ. All were well-formed women, and in all the occiput of the child presented anteriorly. Six mothers and twelve infants died.

Until within the past year or two, it has not been customary for physicians in this neighborhood to visit pregnant females (even in town—in the country it would be impossible) before the inception of labor; and in but one of the above cases was an opportunity afforded me to observe and treat the premonitory symptoms. This one had general œdema, with frequent and scanty secretion of urine. Repeated examinations, continued even after labor had begun, failed to reveal the presence of albumen; and from this fact, together with the absence of other recognized unfavorable symptoms, I was led to regard the oc-

currence of convulsions in my patient as an utter impossibility. Convulsions set in at the close of a tedious labor, and in five hours she was a corpse.

In two (fatal) cases, there was no perceptible œdema at the onset of convulsions; in two it was confined to the feet and legs; in the other ten it might have been called general, but varied in degree and location. Headache was generally, but not invariably, complained of; and sluggishness of the bowels was the rule. The function of the kidneys appears to have been more or less compromised; but in only one case was advice sought in consequence of this fact.

In the case of the patient mentioned above, who recovered from convulsions in the eighth month of gestation, and died of a subsequent attack five weeks later, the first convulsion occurred each time while she was preparing food for herself between the regular hours for meals. In two other cases convulsions supervened immediately upon a hearty meal. This coincidence arrested my attention; and from the eight who survived, and from the family of those who died, I have learned of the existence of an unusual appetite in all of the cases mentioned above. It was also present in nine cases reported to me by other physicians; and, in this vicinity, I can hear of no case of puerperal convulsions which occurred in a patient whose appetite was persistently feeble. This increased appetite was not capricious, but strong, nitrogenous food was craved; and in several cases food was required during the night. With some it commenced soon after they became pregnant; in others, it was noticed in the latter months, or weeks only; in others again, it came on after months of persistent "morning sickness." Nausea, with loss of appetite for a day or two, occurred sometimes—in several cases frequently—but these symptoms could always be traced to constipation or unusually intemperate indulgence in food. After what the patient and her friends called a sick headache, the morbid appetite returned. With some it was a constant craving —they felt hungry even after a full meal; in others, it was intermittent in character; but in all of the twenty-three cases it was markedly above their normal standard.

Three cases, presenting this phenomenon, have lately been treated by me. Two came under my observation during the

seventh month of pregnancy. Mrs. H. barely survived an attack of puerperal convulsions eighteen months before. She had slight general œdema. Her countenance was usually flushed, of a rather dusky hue, eyes somewhat injected, and she complained of headache and vertigo, with occasional tinnitus aurium. Her appetite was ravenous, bowels rather sluggish, but regular in their daily action, and she voided with difficulty about twenty ounces per day of highly-colored urine, containing urea and urates in excess, but no albumen. She had been using acetate of potash and saline laxatives, under the direction of a neighboring physician, before she put herself under my charge.

Mrs. B., primipara, presented nearly the same train of symptoms. Her head ached periodically, and the attacks were invariably preceded for several days by what she graphically called "painful hunger." Dysuria followed, coinciding with, or slightly anticipating the headache. The pain was confined to the top and back of the head, and was described as agonizing, and as though a pan of coals or else a lump of ice was resting upon the affected spot. Both Mrs. B. and Mrs. H. begged to be bled. They felt an undue tension and throbbing sensation throughout the whole body, which they thought was due to an excess of blood. They were both directed to take from six to ten grains of the citrate of iron in a tablespoonful of wine, a short time before each meal, and even between meals, if the appetite returned. In addition, saline laxatives (generally the Crab Orchard Salts) were used in such doses before breakfast as insured mushy stools. Later, benzoic acid was given. This I prescribed in the form of pills, and ordered 2½ to 5 grains every two hours if necessary. Under this treatment, Mrs. B. became comfortable in a few days, and required one or another of the medicines only occasionally. Mrs. H., on the contrary, was relieved only while taking the medicine, and the treatment was continued until her confinement.

To the third case I was called only ten days before accouchement. She was more œdematous than either of the others, was almost always constipated, and had an insatiable craving for food. She passed in twenty-four hours not quite a pint of urine, loaded with urea and urates, but containing no albumen. The head felt heavy, but pain was not marked. There were flashes

of light before the eyes, sleep was much disturbed, and the ring finger of both hands felt numb, and tingled upon pressure. Five grains of benzoic acid were given every two hours until thirty grains had been taken; the bowels were freely moved with the Crab Orchard Salts, and ten grains of citrate of iron were ordered before each meal. The effect was simply marvellous. Within the next twenty-four hours, forty ounces of urine were passed; the appetite was effectually controlled, and under this treatment the œdema had almost disappeared before labor set in. All of these patients were well educated, intelligent women, and were so well satisfied with the effects of the remedies that they, without solicitation, carefully carried out the plan of treatment. They all passed through the ordeal of confinement without a bad symptom.

It may not be amiss to explain the *rationale* of the treatment I adopted. I believed the increased appetite to be a symptom of an excessive waste of tissue, due to some catalytic action going on in the economy. It may be that the effort to supply nourishment to the fœtus in utero stimulates to excess, in such cases, the ordinary metamorphosis of blood-producing tissues. All observers indirectly acknowledge such a metamorphosis of tissue, for it is notorious that the blood of pregnant women is overcharged with fibrine—an acknowledged excrementitious product. Consequently, they in whom this metamorphosis goes on to excess, although in appearance plethoric, are not so in reality, except as to quantity of blood; nor can we truly say that they are hydræmic. Their blood, loaded with fibrine, and possibly other products of disintegration, is thick and viscid. The circulation is, consequently, sluggish, and the overworked kidneys and bowels perform their functions but imperfectly; while, for the same reason, general or partial œdema must almost always be present.

Iron was prescribed by me, for its ultimate effect upon the blood-producing tissues, and also to relieve the morbid appetite. The latter it effectually does, if given a short time before meals, or whenever there is a craving for food at unusual hours. The benzoic acid aided in converting the excrementitious products into forms which could be eliminated by the kidneys, while the saline laxative relieved the clogged portal circulation. The the-

ory may be wrong, but I can claim for the treatment that it was followed by the most gratifying results.

Naturally, I feel a hesitation in advancing what I believe to be an original observation upon a disease which has been so carefully studied; but I am somewhat reassured by the prominence which, in all writings upon the subject, is given to an overloaded stomach as an exciting cause of puerperal convulsions.

Would we be likely to find an overloaded stomach if (as Braun and others say) the convulsions are due to an acute or chronic nephritis, in which disease even the desire for food is lost? (*Vide* Niemeyer, Aitken, &c.)

My experience with nephritis has not been very great, but I have five times seen it in the pregnant female. Two patients miscarried—one in the sixth, the other in the seventh month—and recovered after a somewhat tedious convalescence. The third died in profound coma, just after giving birth to a dead infant at full term; the fourth a few weeks after delivery; and the last I treated for Bright's disease ten months after confinement, when I lost sight of her. In not one of these five cases did convulsions ensue. They were all œdematous, with albuminous or even bloody urine, and complained of nausea, loss of appetite, and absolute aversion to food. Headache was present, and with it drowsiness and more or less stupor. In this last particular they differed essentially from all of the cases which terminated in convulsions. These were troubled with wakefulness or at least restless and disturbed sleep.

Since the discovery, recorded by M. Blot in his inaugural thesis, that albumen was present in the urine of pregnant females who afterwards had convulsions, the uræmic theory of puerperal eclampsia, elaborated in its various ramifications by Cazeaux, Braun, Simpson, Frerichs and others, has become almost an article of faith amongst the profession. Leaving out of the question for a moment the value of albuminuria as a symptom of renal disease, let us compare uræmia, occurring in the course of acute and chronic nephritis, with the conditions incident to puerperal convulsions:

In Uræmia:	In Puerperal Cases:
Loss of appetite.	Increased appetite.
Drowsiness, mental and bodily hebetude.	Wakefulness, restlessness.
Coma frequently preceding convulsions.	Coma never precedes convulsions.
Temperature steadily falls; is not elevated even after a convulsion. (M. Bourneville, *Brit. & For. Med. Chir. Review*, Oct., 1875.)	Temperature steadily rises, and is markedly elevated after each convulsion. (To the truth of this observation by M. Bourneville, I can bear testimony.)
Profound coma after convulsions, and generally undisturbed by restlessness, especially in fatal cases.	Profound insensibility after convulsions; but tossing of the arms and general restlessness characterize a large number of fatal cases.
Nephritis always gives rise to such marked symptoms that the patient, as well as her friends, soon become alarmed.	Many cases of puerperal convulsions come on in patients who, apparently, and judging from their description, have never before enjoyed such health and appetite.
In Bright's disease, there is an excess of serum, the clot not constituting more than one-fourth of the blood. (*Aitken*, vol. I, p. 144.)	The whole amount of blood coagulates.

Uræmia is frequently a sequence of puerperal convulsions. In this case, the convulsions cease, the coma becomes more profoundly quiet; there is more or less complete suppression of urine, and the temperature apparently (I did not use the thermometer) falls below the normal standard. In favorable cases, the coma, after a varying interval, gradually lapses into a natural sleep, the kidneys meanwhile resuming their function, and the skin becomes natural to the touch. The symptoms followed such a course in several of the cases mentioned above, the coma and sleep lasting from eighteen hours to five days after the last convulsion.

Two fatal cases terminated in coma, with suppression of urine and a low temperature—the one twelve, and the other more than sixty hours after the last convulsion. (The first of these two

had unequal pupils, complete relaxation of the sphincters, and other symptoms of a fatal apoplexy.)

In all these cases, and indeed whenever I examined urine passed after a convulsion, albumen was found; but I have also invariably found it in the urine first passed after an epileptic attack in the non-pregnant state.

Albumen in the urine by no means implies the existence of a nephritic disease. Those who have not studied the subject specially will be surprised at the long list of diseases in which, at one stage or another, albumen generally appears in the urine. F. Simon, Becquerel, Martin Solon, Lehmann, Hiller, Begbie, and others (*vide* Hiller, *Albumen in the Urine*) have found albumen in the acute and desquamative stages of erysipelas, in scarlatina (both simple and dropsical) and variola, in various skin diseases (both acute and chronic), in most organic affections of the abdominal viscera, particularly if accompanied with ascites, in diseases of the heart, etc. In pneumonia at the period of resolution, and during the absorption of pleuritic and pericardial effusions, as well as in consequence of the action of cantharides and stimulating diuretics generally, it is commonly observed. The urine first passed in reaction from cholera is almost always albuminous. I have twice seen it after severe superficial burns.

After the above citations, I leave to others to explain why we do not always find albumen in the urine of pregnancy. Even persistent albuminuria is not necessarily pathognomonic of renal degeneration. I can cite a case of albuminuria of six months' standing, which was entirely relieved, without further treatment, by the removal of an intra-uterine polypus. I should regard albuminuria as a very grave symptom in pregnancy, as an indication of a depraved state of system, and not necessarily of a kidney disease. Nor would I despair of treating this condition, as Braun and Cazeaux do, but would certainly expect benefit from the plan I have above indicated.

The hydræmic theory will not apply to any of the cases that have come under my observation. In all these the blood was red, thick and viscid, and the whole amount coagulated into a firm, dark clot.

Some German investigators have recently, by prolonged ef-

forts, induced a few tractable animals to die in convulsions, after repeated depletion; and we are gravely asked by otherwise competent authorities to believe that the condition of the eclampsic patient is similar to the one thus brought about. This is properly the anæmic theory. If it applies to the human species, it is remarkable that we have no recorded cases of convulsions resulting from secondary hæmorrhages in civil and military surgery, or from the excessive and prolonged loss of blood incident to fibroid and cancerous degenerations of the uterus. Possibly either one of the above theories may account for the occurrence of convulsions in the class of females who are confined in the charitable institutions of large cities; if so, it only confirms my belief that observations and statistics, based upon such material, are entirely inapplicable to the cases a physician is called upon to treat in healthy, well-fed communities.

As regards the treatment of puerperal convulsions, I am an advocate of the lancet. I began practice as a sincere opponent of venesection, and it is interesting to note that the strongest opponents of bleeding are found amongst those of my medical brethren who confess to have seen but little of this terrible malady. In looking back over the record of the past eight years, I feel that I should have bled when I did not, and bled more when I did. This change of feeling was brought about partly by the success which crowned the vampyrism of others, and partly by the deficiency of post partum hæmorrhage in the above cases. It was markedly below the normal standard in every case I saw, and I no longer dread this bug-bear of writers upon puerperal convulsions. One of the above cases was immediately relieved by an alarming hæmorrhage from the tongue, which she had nearly bitten off in her unconscious struggle. I am convinced that one large bleeding is better that repeated abstraction of small amounts of blood. Along with this, I should administer three to five drops of croton oil, and then depend upon chloroform, ether, morphia and chloral, in the order mentioned. One case was effectually controlled by the inhalation of ether after chloroform had been used without effect. I would avoid irritating the uterus by needless examination, but hasten delivery by every means recommended, except bloody *accouchement forcée* and craniotomy, which procedures, for convulsions alone, are totally unjustifiable.

In April, 1876, Dr. Shaffner, of this place, saw with me a woman in convulsions who was suffocating from the mucus accumulated in the fauces and larynx. To relieve her, I turned her upon her right side. The convulsions, which had been almost continuous, ceased immediately. In about an hour she turned upon her back, when they recurred with their former severity. She was again turned upon her side, and had no more convulsions until her death, twelve hours later. I had not then seen Dr. F. J. Brown's statement (*Practitioner*, April, 1876) that he arrested almost instantly two cases of convulsions (from other diseases) by turning the patient upon the left side. In December, 1876, I visited, in consultation, a patient with convulsions eight weeks after confinement. As I entered the room she was grinding her teeth, and her eye-lids were twitching in a beginning convulsion. Without a moment's delay I turned her upon her left side, when the symptoms disappeared. She was kept upon her side, and had no more convulsions. Unfortunately I did not bleed her, but, as the symptoms did not appear urgent, allowed myself to be persuaded to rely upon chloral and bromide of potassium, in moderate doses. I left her in the care of her own physician, and she died in apoplectic coma twelve hours after the last convulsion. (She had been troubled with dyspepsia and want of appetite throughout her pregnancy, and developed the morbid appetite only after confinement.)

This article, in many respects imperfect, has not been prepared with the ambitious idea of exhausting so complicated a subject as the ætiology of puerperal convulsions, but merely to give utterance to views matured by years of careful observation and painful personal experience. Three of my nearest relatives, with their infants, have perished from this frightful disease—only one being included in the fatal cases recorded above. Will any one blame me for endeavoring to excite discussion, and thus gain information upon this most painfully interesting topic?

With this object in view, let me briefly summarize the points to which I desire particularly to draw attention:

1st. Boulimia in pregnancy, a symptom predisposing to puerperal convulsions; its relief by employing iron *before* meals, or whenever the appetite is experienced; in other words, making iron take the place of food.

2d. The use of benzoic acid in connection with scanty urine, with urea in excess. It was long ago recommended by Frerichs when albumen was present, with deficiency of urea, or in suppression, with the idea of preventing the absorption of urea. Without committing myself to this idea, I regard it, for the reasons above stated, if time is given it, the most valuable prophylactic we have against puerperal convulsions. I frequently prescribe it, when dysuria is alone complained of, in the pregnant state, and always with marked benefit.

3d. The absence of normal hæmorrhage in the cases recorded above. I have frequently seen the uterus contracted so firmly as to feel like cartilage under the hand, while in several cases all the blood lost could have been wiped up dry with a handkerchief.

4th. The pertinent fact that all writers and observers who have seen much of this disease recommend bleeding, while its opponents are found amongst those who confess that their experience is but limited. I am no routinist, but I never saw a case of puerperal convulsions in which, after the first few convulsions, alarming congestion or œdema of the brain or lungs, or both, were not so imminent as to demand free venesection. I am absolutely certain that I have never seen damage done by bleeding in these cases. Before I came to this conclusion, I was engaged to attend apparently a most hydræmic lady in her confinement. During my absence, she fell into convulsions, and in the course of twenty-four hours was bled five times, to the extent of a pint or more each time. She not only survived, but from a cachectic, chalky-complexioned invalid, who for years had literally lived upon iron and tonics, she has developed into a blooming, red-cheeked matron, and has enjoyed since that time better health than has been her lot since puberty.

5th. In two cases, convulsions were instantly relieved by turning the patient upon her side. My attention was never before called to the fact, but, to the best of my recollection, all my patients were upon the back before and during convulsions. Can the fact, that the lateral posture is customary in England during confinement, while in France and Germany the woman lies upon her back, account for the greater prevalence (according to statistics—*vide* Cazeaux, Braun, etc.) of puerperal convulsions in the latter countries than in the former?

6th. Finally, if asked to define the disease, I should say that the cases of puerperal convulsions which I have observed are in many respects comparable to the epileptic attacks which in some otherwise healthy subjects occur in connection with deficient or temporarily suppressed menstruation. I have seen one case of this kind die in convulsions. Another case is now under observation.

ART. III.—*Hæmathorax—Treatment by Aspiration.* By E. T. EASLEY, A. M., M. D., Little Rock, Ark.

In May last, Colonel H. H. R., a useful and distinguished citizen of this State, whilst engaged in his duties as a fireman, fell from an upper window to the stone pavement below, a distance of perhaps more than thirty feet. He was conveyed at once to his room, only two blocks from the scene of the accident, and I was invited by the family physicians, Drs. Hooper and Breysacher, to visit him. An examination discovered that the patient had sustained a number of palpable injuries. The hip and left leg were much contused, as was the same side from the face downward; the seventh left rib was broken, the injury being uncomplicated externally, and there was Colles' fracture of the left wrist. The left side was secured in the ordinary adhesive plaster dressing, applied from spine to sternum, with the view of limiting respiration to the abdomen and the sound half of the thorax, and the wrist was placed firmly in Bond's splint.

I may as well say, in passing, that I have never used any plan that has equalled this little device of the Philadelphia surgeons in obtaining good results in this fracture. If a little firm, yet soft, padding be adjusted in the convexity of the radius, it is faultless.

The general appearance of the patient was exceedingly unpromising; so grave was the prognosis that fears were entertained that he would not rally. The eyes were lustreless; the face shrunken and pallid; the skin covered with clammy sweat; the respiration imperfect, sighing and accelerated; the pulse quick and feeble—at times intermitting, and at times wholly wanting. The intellectual faculties were obscured, the aberration being so decided that his ejaculations were moaning and incoherent. Combine with this group of symptoms extreme restlessness, with nausea, vomiting and hiccough, while the patient did not become sufficiently conscious to realize his situation for over eight hours, and we have presented a typical case of pro-

found and prolonged shock—as graphic an illustration of that alarming condition as could well be portrayed. Such a case could, of course, only be managed on the general principles which are familiar to every surgeon. The details of the treatment need not, therefore, be enumerated.

A few observations are of such manifest importance in this relation that they cannot be insisted upon too often. In the first place, stimulants are possibly always indicated, but they are not to be administered *ad libitum*, but cautiously, lest reaction transcend the limits of safety, and febrile disturbance succeed. The specific respiratory stimulants, I am satisfied, are of great value. To this end, the sulphate of atropia was exhibited hypodermically in the present case with apparent benefit. Again, when the patient has been so far restored as to be conscious, or even semi-conscious—especially if the restlessness continue great, the happiest effects may be expected from the inhalation of chloroform, and this for the obvious reason that it *limits shock* by removing at once the moral element of the case. Whilst it secures transient rest as effectually as opium, it has none of the disadvantages of that drug.

The most perilous sequence of protracted shock is unquestionably that first described, and admirably described, by Travers as *prostration with excitement*—a condition nearly akin to traumatic delirium, and one which may end in a typhoid state, coma, and death. To anticipate such a catastrophe, such proplylactic agents as quinine and opium are to be given, and early attention should be directed to the re-establishment of the deranged or suspended secretions. It is not to be forgotten that shock and exhaustion are not only direct causes of sudden death, but that they foretoken a vitiation of all the secretions and reparative products, and hence are to be regarded as predisposing causes of a large range of fatal maladies.

Colonel R., notwithstanding the long continuance of his unfavorable symptoms, rallied well, and by 9 o'clock the morning after his fall, had passed into favorable reaction, at which time he partook freely enough of both food and drink.

On the evening of the third day the patient's breathing became gradually oppressed, and the face anxious. He was restless and disposed to assume a sitting posture in bed, with the body bent forward. A more careful examination detected enlargement of

the chest wall on the wounded side, with decided bulging of the intercostal spaces, absence of resonance on percussion, and diminution of the respiratory murmur. Succussion was not attainable to such a degree as to afford any reliable evidence, but the patient, from his sensations, expressed positively the opinion that his chest contained abnormal fluid.

It will be perceived, from both the rational and physical signs, excluding pleuritis or other effusion, that we were brought to deal with a case of hæmathorax. The conclusion reached was that the blood had been effused from small vessels ruptured at the moment of concussion; that it had not been poured out *per saltam*, but continuously, perhaps *guttatim*. The problem presented was, whether it was better to wait inactive, notwithstanding the patient's increasing distress, or at once to attempt his relief; and then we were to consider the means at our command.

After a somewhat prolonged consultation, aspiration was decided upon and performed. The largest sized needle was entered between the sixth and seventh ribs, rather nearer the spine than the sternum. When the stop-cock of the instrument was turned, bloody serum began immediately to flow into the receiver. About six ounces of fluid were evacuated. During the removal, the patient expressed his satisfaction, and at its completion, very decided relief. He became cheerful; his condition in all respects improved; the fluid did not re-accumulate, and convalescence was rapid and uninterrupted.

The case shows, among other points, that rupture of vessels by concussion of the thorax may occur without lesion of important viscera, and recalls, indeed, the fact that there may exist almost every degree of laceration within the chest in the absence of external solution of continuity.

A few words may be said as to the operation undertaken, since its propriety has been gravely questioned, and I do not know that it has been often accomplished. Mr. Poland, in his excellent article on *Injuries of the Chest* (*Holmes' System*, Vol. II, p. 592), writes: "With regard to the attempts at the removal of the blood by means of a tube and pump, this method is attended with too great risk, as the pleura and lung may be injured." I must say that I cannot coincide with this opinion, nor can I admit the force of the objection. Certainly no harm is to be apprehended from passing the needle through the pleura, and if ordinary care be taken, the lung tissue need not be wounded. The fact may at once be detected, should the acci-

dent occur, by the passage of air, and, at worst, only a very limited emphysema is likely to ensue.

It is an observation as old as the time of John Hunter (and no man has more clearly described the symptoms and progress of hæmathorax), that moderate sanguineous effusion becomes readily absorbed. It is granted that this is what commonly takes place; but if the effusion be continuous, and the embarrassment of respiration progressive, there can be no valid objection to aspiration. On the contrary, if the blood had accumulated, clotted and refused to escape through the needle, and interfered dangerously with breathing, I should not hesitate to reverse the action of the instrument, and throw tepid water into the chest, and so let its morbid contents pass out by dissolving the clots. Such a course seems in every way preferable to making a larger opening, which would admit air, and thus lead to suppuration, putrid infection and exhaustion.

Blood poured out into the pleura, as in other cavities, is disposed of in three ways. Oftenest, it is absorbed; more rarely it breaks down into pus; and more rarely still, it becomes organized. The first and most frequent of these results is, of course, the most favorable, and consequently the efforts of the surgeon are to be directed to its promotion. I think it a safe proposition, when a cavity is distended and suffers from the pressure of fluid, that removal of a portion of that fluid will facilitate the absorption of that which remains. So in cases of hæmathorax, if we are only able to get off a part of the collection, we afford the over-taxed absorbents opportunity to do their work more effectually.

The aspirator, depending upon the simple principle that fluid must flow into a vacuum, was one of those happy conceptions which all were glad to recognize, and which all adopted when the intrepid and ingenious young Frenchman had reduced it to practice. If statistics are reliable, and if our notions of antisepsis are not altogether erroneous, the advantages of evacuating closed cavities without the admission of atmospheric air must be sufficiently manifest, to say nothing of the unimportant character of the wound inflicted in the procedure.

I have referred to the administration of chloroform, and wish to add that it is the only anæsthetic I ever give by inhalation.

The preparation of Dr. Squibb, pure and unmixed, is used without reference to age or sex, and I hold with the Edinburgh school, that any patient fit to be operated on at all is fit to take chloroform.

Col. R's recovery is to be credited to the assiduous and skillful attention of his family physicians and to the kindly and judicious advice of many of our medical friends who saw the case.

ART. IV.—*Amputation at the Hip-Joint for Malignant Disease of the Femur—Recovery—Remarks.* By FRANCIS D. CUNNINGHAM, M. D., Professor Anatomy Medical College of Va.; Ex-President Medical Society of Va., etc. Richmond, Va.

On *February* 21, 1877, I was requested by Dr. John G. Skelton, of this city, to meet Dr. W. J. Harris, of Nottoway county, Va., and himself in consultation upon the case of a patient who had accompanied Dr. Harris to the city with the view of seeking further surgical advice. At the consultation, the following history of the case was elicited from the patient, and corroborated by his father and by his medical attendant:

Livingston F. Gunn, aged 30, farmer, residing near Wellville, Nottoway county, Va. Pale and emaciated from pain and loss of rest. Brought to the city on a cot, and moved about with difficulty on crutches by reason of debility and pain caused by motion of the left leg, which is the seat of disease. The patient states that for a number of years, at least ten, he has been subject to what he supposed to be rheumatic pains, which affected at various times his back and lower extremities. In July last, he had continuous pain in the hip and knee-joint, which was treated by a physician as rheumatism. In September, he was hurt slightly by the fall of a bench at a Grange meeting, at which time his left leg received a slight wrench, and the pains in the thigh became more marked and continuous. In the first part of December, he noticed a slight swelling on the inner and anterior part of the thigh, near the junction of the middle and upper third. About this time, he came under the treatment of Dr. Harris, who looked upon the case as one of a rheumatic nature, until he saw the patient again in February, when the development of a tumor, which was in close relation to the bone, suggested trouble of a more serious character. Dr. Harris was thus induced to call in consultation Dr. J. M. Hurt, who agreed as to the malignant nature of the disease and the necessity of speedy interference. The tumor of the thigh continued to increase in size, and the pain became so continuous that the con-

stant use of opiates was required to procure rest and make the patient comfortable up to the time when brought to Richmond. Examination of the affected limb now revealed a tumor about five inches in length and three in thickness, surrounding the shaft of the femur, corresponding to the upper middle fourth of the bone, but projecting to a much greater extent on the inside than on the outside. The enlargement was sensitive on pressure and elastic to the touch, with a suspicious feeling of fluctuation at certain points. The patient could bear the weight of the body on the affected limb, but the effort was attended with considerable pain. None of the glands in the inguinal region were enlarged or sensitive.

After examination and consideration of the history of the case, it was decided that the disease was malignant in its character; that the tumor was an osteo-sarcoma, rapidly destroying the integrity of the femur, and that the only hope of relief was the slight chance afforded by an amputation at the hip-joint. The patient's condition being such that it was of the utmost importance that he should be surrounded by the best hygienic influences, in the event of any surgical interference, and have the attention of friends, it was agreed that he should return home, and, if he consented, have the operation performed there.

He returned home on the 22d February; that night he was awakened by a severe muscular spasm, to find that the femur had parted at the seat of the enlargement, and the leg presented all the characteristic features of a fracture of that bone. The occurrence decided him at once to have the operation performed, and I was requested to perform it. My engagements prevented me from visiting him before March 2d, on which day, with the assistance of Dr. Skelton, of Richmond, and Drs. Harris, Booth and Epps, of Nottoway, I amputated the limb at the hip-joint in the following manner:

The patient was chloroformed in bed, placed on a suitable table, and the leg carefully bandaged, as high as possible, with Esmarch's bandage. The elastic strap which accompanies the bandage was drawn tightly around the inside of the tuberosity of the ischium and the crest of the ilium, and held in position there by the hand of an assistant. Where the bandage crossed over the track of the femoral vessels, compression was made by a roller bandage placed under the strap. A modification of Signorini's tourniquet was placed on the right side of the trunk, and the anterior pad was so arranged as to make compression over the aorta, an inch below the umbilicus, and rather to the left of the median line. The arrangements for controlling hæmorrhage being made, the Esmarch's bandage was quickly removed, and a circular incision made through the integument of

the thigh, commencing about one inch from the junction of the thigh and perineum. The soft parts were next retracted and divided as is ordinarily done in the circular operation—those in the vicinity of the femoral artery being divided first, and that artery secured before those in the posterior part were cut. The bone being exposed, it was found diseased up to the apex of the trochanter major, easily breaking up under pressure of the fingers. The muscular attachments to the trochanters being carefully dissected off, the capsule was exposed, divided, and the head thrown out of the acetabulum, with some little delay, because of the loss of leverage consequent upon the fracture of the shaft of the bone. Five additional ligatures were applied to bleeding vessels—one of them being placed on the femoral vein, from which there was more blood lost than from any of the arteries divided during the operation. The round ligament and fat at the bottom of the acetabulum were carefully dissected out, and the capsular ligament trimmed off close to its pelvic attachment. The precautions used were sufficient to perfectly control the hæmorrhage from the femoral artery, but the pressure of the abdominal compress turned the venous current downwards, and decidedly increased the discharge from the femoral vein—two-thirds of the blood lost, in fact, being from this vein. The wound was closed so that the line of union would be oblique from without downward and inward. Seven sutures were used, and the stump was supported by adhesive plaster, over which a dry compress was secured by a roller bandage passing over the stump and across the body. Forty-five minutes elapsed from the moment the patient was placed on the table to the moment of his return to consciousness, after being placed in bed; and during this time the abdominal compression was not kept up longer than ten minutes, for it was relieved as soon as the section was made, and the femoral vein and artery tied.

While waiting for the capillary hæmorrhage to cease, before closing the wound, the pulse of the patient became dangerously weak, and he exhibited signs of extreme prostration. The injection of two ounces of whiskey into the rectum, and the substitution of the mixed anæsthetic for the chloroform, quickly brought on slight reaction. The injection of the whiskey was repeated just as the patient was removed from the table, and bottles of hot water were placed under the bed-clothes. On being aroused to consciousness, the patient complained of severe pain in the knee and thigh of the amputated leg.

The patient's pulse, which, before the operation, was 100 and feeble, when he was placed in bed was 120, and indicative of such prostration that a fluid ounce of whiskey and ten drops of laudanum were directed to be administered every hour until he

fell asleep, or reaction was completely established. We remained with the patient an hour and a half after the operation. Then, seeing his condition improving, we left him in charge of Dr. Harris and Dr. Hurt (the latter having arrived after the operation), who agreed to remain with him that night. In taking leave of the patient, I felt assured that I was leaving him in good hands, surrounded by his friends, and under the care of gentlemen, a brief association with whom only served to confirm what I had long since heard of their superior skill and judgment in the general practice of the profession.

From the nature of the case, and the imperfect appliances at the farm-house, where the operation was performed, it was impossible to estimate exactly the amount of blood lost, but it could hardly have been above six ounces.

For the subsequent history of the case, I am indebted to Dr. Harris, who,with Drs. Hurt and Booth, attended it to complete recovery, and kept me informed as to the condition of the patient.

By reference to Dr. Harris' notes, I find that the patient continued gradually to improve, under the stimulants and anodyne, for twenty-four hours after my seeing him; but, at the expiration of that time, obstinate vomiting, accompanied by pain over the umbilical region, set in, producing alarming prostration. Looking upon these symptoms, after they proved to be not at all relieved by the ordinary remedies, as the result of pressure of the tourniquet causing obstruction of the bowels, from paralysis of the muscular coat of the intestines, Drs. Harris and Hurt, on the third day after the operation, made use of a warm water enema. This, slowly and carefully administered, had the effect of emptying the bowels, and this result was followed by the relief of the vomiting, &c.

Two-thirds of the wound healed by the first intention. The ligatures were gradually removed, and on the 21st day after the operation, that from the femoral (the last one) was removed without difficulty.

Careful nursing, beef tea and stimulants had a good effect, so that the patient progressed favorably until about April 5th, when a suspicious look about the granulation near the centre of the wound, reported by Dr. Harris, induced me to visit him for the first time since the operation. A mass of granulations was observed protruding from the wound, apparently starting from the cavity of the acetabulum, and, from its pedunculated appearance, was strongly suggestive of a return of the disease or fungous growth. Upon closer inspection, it was decided that the growth was simply excessive granulation, and chromic acid was substituted (for the strong carbolic acid already used) with benefit by Drs. Harris and Hurt.

During this visit, the patient also manifested some constitutional disturbance, due to a small accumulation of pus in the acetabulum. This was evacuated, and the cavity washed out with a solution of carbolic acid. Subsequent use of the compress and bandage prevented further accumulation, and the patient con-

tinued to improve, so that, by May 1, he was able to superintend operations on the farm with little or no discomfort, although a trifling discharge still kept up from the centre of the wound.

On July 4th, the patient visited this city, and a photograph (from which the above wood-cut was made) was taken. The

cut simply gives the line of union of the wound, and some idea of the cicatrix, without indicating the existence of a small sinus which led from the centre of the wound down into the acetabulum. Through this sinus a probe was passed to the bottom of the acetabulum, but nothing positive was learned, except that there was not as yet firm consolidation of the tissue in that cavity. The general health of the patient improved, and at this time (September 1st) he weighs twenty-five pounds more than at the time of the operation, and the wound is entirely healed.

An examination of the diseased thigh after its removal showed complete destruction of the femur at the point of fracture, and the ends of the bone were imbedded in a mass of gelatinous material mixed with osseous deposits and cartilagenous tissue. This was, therefore, a mixed tumor, partaking of the nature both of a sarcoma and chadroma. No opportunity for a microscopic examination was afforded.

Prior to the performance of this operation, I was so fortunate as to have read the history of two successful amputations at the hip-joint, performed by Dr. Erskine Mason, of New York, and reported in the *New York Medical Journal* for December, 1876. In the management of my own case, I was guided very much by the information conveyed upon his operations in the remarks by Dr. Mason. As in one of Dr. Mason's cases, the danger, which at one time threatened to carry off our patient, arose from the employment of the abdominal tourniquet, and was only averted by the correct diagnosis of Drs. Harris and Hurt, and the judicious means they employed to remove the disturbing cause.

My experience in this case leads me to endorse the warning given by Dr. Mason as to the dangers of the abdominal tourniquet. That could not, for as much as ten minutes, have been exerting a pressure sufficient to make any impression on the artery, for the pressure was relaxed as soon as the femoral artery was secured and the effect on the venous current observed. The danger of peritonitis, of paralysis of the bowel, and the fact that, with it, some pressure must be made on the ascending vena cava, with the effect of arresting the current and increasing the flow from the femoral vein, are all objections to its employment. Both judgment and great care are necessary in its use—care in the adjustment of the pad, and judgment as to length of time and degree of pressure to be made.

I have stated that in this case the strap of Esmarch's bandage was applied so as to pass behind the tuber ischii and over the dorsum ilii and over the crest, just behind the anterior superior spinous process. Slipping of the strap was prevented by the hand of an assistant, which acted as a stirrup and maintained the oblique direction; otherwise, from its elasticity, the strap would have slipped down from the gluteal muscles, until its line of application was at right angles to the thigh. The assistant, whose hand played, in this case, the part of stirrup, was an able-bodied colored man. He performed his part most satisfactorily, and with no inconsiderable expenditure of strength; so that I am sure, with a compress over the femoral and the elastic strap running as described above, there would have been but little chance of hæmorrhage, even without the tourniquet over the aorta. So firm is my conviction that the hæmorrhage can be controlled by the elastic strap applied as suggested, that, should it be my fortune to be called on to perform this operation again, I would certainly rely upon it, so far as to place the tourniquet in position only to be used in case of manifest necessity. In using the strap, I would, however, not rely upon the hand of an assistant entirely to keep it in position, but would resort to some device whereby the pressure of the strap would be transferred from the hand of an assistant to some substance as a stirrup less sensitive to pressure even than the hand of our colored aid, whose endurance and muscle elicited the admiration of all present.

The admirable remarks of Dr. Mason, in connection with the history of his two cases, convey an amount of information, and furnish statistics which are invaluable to those who may be interested on the subject, and have induced me to put this case on record and offer a practical suggestion, which, I hope, may lessen some of the dangers of so grave an oporation. With good assistants, the Esmarch's bandage and strap properly secured, the future operator may, I think, hold the abdominal tourniquet in reserve, with his mind relieved of the fear of danger incident to its use.

This operation was performed in a farm house, fifty miles from the city, where there were but few conveniences and no trained nurses, and the patient passed from under my observation two hours after the operation. To Dr. Harris and his associates,

Drs. Booth and Hurt, who played the part of doctor and nurse in rotation until the patient was out of danger, I am much indebted for the privilege of reporting a successful case; and to their kind and constant care I am sure my patient owes his life.

ART. V.—*Treatment of Tubercular Phthisis. Especially by Vitalized Phosphates—Glycerite of Kephaline.* By CHARLES G. POLK, M. D., Philadelphia, Pa.

Heretofore no remedy has been found capable, as a rule, of doing more than delaying the fatal end, although ever and anon a new remedy is announced, with high promises of specific virtues. Many of these have been found worthless, while several yet retain a certain share of professional confidence. Among these may be enumerated cod liver oil, the salts of hypophosphorus acid, extract of malt, pancreatine, and koumiss. Of these, cod liver oil is the only one which is held in undisputed esteem; the others are under judgment; but I believe they, each and all, are useful when judiciously administered.

The hypophosphites belong to two classes—mono-basic hypophosphites, formed from vitreous phosphorus, and tri-basic hypophosphites, isolated from vegetable and animal organisms. The profession is indebted to Churchill, of Paris, for the former; the latter were introduced to the profession by the writer about six years ago, after numerous experiments with them, extending over a period of thirteen years. Dr. Wiley, in a paper on the *Glycerite of Kephaline* (*Louisville Medical News*, June 2, 1877), reports cases of consumption treated by him in 1872. But unquestionable evidence can be produced of the employment by me of isolated brain principles as early as May, 1859. Hence, other claims of priority are untenable.

To Liebreich, of Germany, the credit is usually accorded of having first isolated "protagon" from the brain. My own researches antedate his; but our methods are so different, and the results attained so unlike, that neither of us can entertain rival claims. Liebreich's process is far more simple, and better adapted to histological research. He beats the brain to a pulp, washes it with ether and water so as to remove the cholesterine, extracts the phosphorus compounds with alcohol, and precipi-

tates them at a low temperature. Protagon thus obtained, is a compound body, consisting of lecithene and kephaline. The former is the more abundant; the latter sustains a much higher relation to nerve power. The former contains the phosphates and phosphites with oleo-phosphoric and glycero-phosphoric acids; the latter consists of the true nerve pabulum—the tribasic hypophosphites of the alkalies with glycero-hypophosphorus acid. These hypophosphites are very soluble and extremely sensitive, being rapidly oxidized in a temperature exceeding 120°F., or by the action of mineral acids into phosphates. Consequently, in isolating them, the temperature must be kept below that point.

In the autopsies made by me in 1857, and referred to in the *Medical and Surgical Reporter*, August 2d, 1873 ("*Phosphate of Iron*"), I found a marked deficiency of protagon in the cerebellum, base of the cerebrum, and in the medulla oblongata. The loss of the hypophosphites was relatively greater than the other constituents of protagon. This I verified in twenty examinations. The uniform association of phthisis with deficiency of this most valuable of the components of protagon, certainly places the relation beyond the possibility of a coincidence, and naturally connects the two together in the circle of cause and consequence.

The early indications of phthisis are evinced in defective power of the medulla oblongata, the pneumogastric and spinal accessory nerves. The initial lesions relate to these nervous tissues and the functions over which they preside; and pathological histology points to these particular nerve structures as especially deficient in cerebric acid, the hypophosphites and albumen (kephaline)—the pabulum of the brain.

Whatever modifies the power of the pneumogastric must also modify the performance of the functions subordinate to its influence. If the medulla oblongata, from which the pneumogastric derives its excito-motor, as also probably its excito-sensory functions, be unable to generate sufficient nerve force, the consequence will be shown in the functions of the organ to which the pneumogastric is distributed. If kephaline be the pabulum of the brain—the essential principle which animates nerve structure—it seems axiomatic that whatever modifies the quantity and quality of kephaline, must also modify both mental and physical

conditions. Routh, of London, than whom there is no higher authority, has long since demonstrated that white softening of the brain is attended with a rapid disappearance of the phosphides and a corresponding loss of function. Many other facts and authorities might be quoted to prove the relation of kephaline to the normal action of the brain.

By connecting filaments, the sympathetic and the pneumogastric nerve form the excito-secretory and the excito-nutrient nerve of digestion and respiration. The excito-nutrient nerve function is, however, mainly derived from the sympathetic; and yet it is very much modified by the conditions of the pneumogastric.

The early indications pathognomonic of tuberculosis may be briefly stated: First, Impaired nerve power, inducing abdominal breathing, and quiescence of the apices of the lungs, thus favoring irritation, congestion and inflammation. At this stage, an elevation of temperature may occur—more obvious towards evening. Gastric digestion is not so generally in abeyance as the duodenal. The deranged nerve action, reflected through the cœlaic plexus, is evidenced by pancreatic deficiency, but not so much in pancreatic deficiency as in pancreatic inefficiency. As a product of imperfect digestion, butyric acid is generated. This more than neutralizes the normally alkaline pancreatic juice; and by interfering with the emulsification of the oleaginous elements of the food, induces the eructations of ill-metamorphosed fatty acids—so common in phthisis—and brings about a dislike for all fatty articles of food, as described by nearly all writers on tuberculosis. In addition to these things, the liver is sluggish, in some instances producing a jaundiced condition.

In the above well recognized early symptoms of phthisis, all the symptoms refer to the pneumogastric nerve, to the organs it supplies, and also to the plexuses of the sympathetic, in which the nerve influence of the pneumogastric is strongly displayed. If, then, deficiency of kephaline be uniformly found in the medulla oblongata of consumptives; if the medulla oblongata be the fountain of the nerve influence transmitted through the eighth pair of nerves; and if the normality of this influence be inseparable from the integrity of the organs and functions over

which it presides, the conclusion seems to be very rational that phthisis finds a prime factor in the deficiency of kephaline.

There are, however, some facts which seem to sustain the theory that, whatever induces an excessive loss of the phosphides will generate, *de novo*, tuberculosis. No one who has observed the connection between insanity and onanism, has failed to notice that nearly all who are insane from self-abuse, die of tuberculosis. True, the confinement to which the insane is subjected is conducive of consumption, or would be so if imposed on a healthy person. Yet, the records of insane asylums show that insanity, resulting from many other causes, seems to exert rather a prophylactic influence—that such insane enjoy a marked immunity from tuberculosis, notwithstanding their deprivation of out-door exercise and other hygienic privileges conducive to health. All who have encountered tuberculosis as the result of onanism, will agree with me that they are almost invariably forlorn and hopeless cases, which proceed from bad to worse, until death comes and liberates the debased soul from the polluted body.

The above result certainly connects, as the links of a pathological chain, onanism, insanity and tuberculosis. Can this ætiological relation be explained? I think so. Chemical examination of semen shows that it is very rich in cerebric acid, cerebrate of calcium and cerebrate of sodium, associated with albumen. Onanism exhausts the supply of the cerebric acid and the cerebrates; the brain suffers, and fatuity ensues. At a later period, the drain of the cerebrates induces a deficiency in the medulla oblongata; derangements follow, and tuberculosis is the ultimate result. Hopeless as these cases usually seem to be (and I have encountered more than a hundred in which the tubercular trouble seemed to accrue from onanism, independent of hereditary or other exciting or determining causes), if unassociated with spinal or brain softening, I have found them quite manageable, if the habit be abandoned and kephaline, or even protagon, be administered.

But there are sufficient reasons for regarding the phosphates as sustaining as important relation to organic functions as protagon and kephaline. The evidences may be said to be even more generally accepted than the facts already presented. Prof. Horsford has given us the aphorism, "without phosphoric acid

there is no life," and all histological research tends to prove its correctness. In all animal organisms, phosphoric acid is invariably found, holding as important a relation to vegetable life as the cerebric acid does to brain and nerve life. Some years ago, the writer removed all the phosphates from the food of three dogs, but supplied them with an abundance of nitrogenous food—in fact, gave them a diet which any canine might gloat over, with the exception of the phosphates. In a few days the dogs grew restless, walked around their kennel, whining, and exhibiting voracious appetites. I then gave them the ordinary phosphate of lime, but continued to remove the organized phosphates from the food; this did not satisfy their wants, and they rapidly emaciated and became weak. At the end of a few weeks, I discontinued the experiment, and the dogs were supplied with animal and vegetable phosphates, when they rapidly regained their former vigor. (*Med. & Surg. Reporter*, August 2d, 1873.) This experiment teaches the high relation the organized phosphates sustain to life and health.

But in the experiment, the ordinary phosphate of lime was supplied with the food, and yet no benefit accrued from it. We learn, therefore, that the phosphates of the laboratory do not correspond entirely with the phosphates of organic matter. Those which have been elaborated in an alembic of an animal or a vegetable, cannot be manufactured in the crucible of the chemist. His production is but feebly, if at all, appropriated by the digestive and assimilative powers of an animal, and consequently cannot subserve the purposes of organic life. It is only the phosphates which have been vitalized in a vegetable or an animal that deserve the appellation of therapeutic agents. Even lactic acid seems to restore assimilative properties to the non-organismal phosphates to only a certain extent; consequently, to the lacto-phosphates, although far preferable to ordinary phosphates, cannot be assigned the higher mission of nutrients. The lacto-phosphates of lime and iron, in the absence of the organismal phosphates, is, however, worthy of trial, and will prove an efficient tonic.

The physiologist points to nitrogenous articles of food as the highest type of human aliments; but chemical analysis and daily experience fail to corroborate this view. Liebig, speaking of the

relative value of different articles of food, says: "We find in beans, peas and lentils a large per cent. of nitrogenous elements, but they are deficient in the component parts of bone—the phosphates of calcium and magnesium. They therefore satisfy the appetite without increasing the strength. On the other hand, wheat, which does not contain over 2½ per cent. of nitrogenous constituents, is the highest type of human food. But chemical analysis shows that wheat is remarkably rich in soluble or vitalized phosphates, and in cerebric acid, or an acid apparently identical with it.

The plasticity of the exudations from which tissue is elaborated, and also the activity of the functions which they perform, instead of being entirely due to their fibrin, are in a far greater degree influenced by the phosphates of calcium, magnesium and sodium. Phosphoric acid is inseparable from the vitality of these exudations. When not vitalized by its influence, these exudations are incapable of organization, and are prone to decay—undergo tyrosis—exactly the very result we witness in the exudation of phthisis. In the fibrinous exudation of dropsy, we also have a familiar example. This is often abundant, but of a low degree of vitality, incapable of organization; it may be absorbed, or empyema may result. Very similar results follow acute hydrocephalus, tubercular pleurisy and peritonitis.

From this brief and imperfect presentation of the views I entertain, it will be seen that I regard the tubercular diathesis as dependent upon a feebly organized medulla oblongata and marked deficiency of the phosphoids in its structure—especially anhydrous cerebric acid in association with albumen; also that there is an excessive waste of the phosphates, through the butyric acid generated in the duodenum, as well as the deranged relation between the oleaginous and albuminous constituents of the food induced from the same source.

As the disease is really an expression of vital deficiency, the first and chief indication of treatment is to overcome this deficiency. Exercise in the open air is of the highest importance While McCormac may have exaggerated the truth, in attributing the entire series of tubercular lesions to want of wholesome air, I am sure it tends to create the tubercular diathesis.

Every respiration, every pulsation of the heart, every diges-

tive process, every thought, or passion, or desire, modifies the formulæ of the phosphoids; but all these modifications are essential to health and vigor. The mere presence of the phosphoids in the blood, nerves and brain is not sufficient for brain and organic purposes. They must be in action, undergoing changes, and performing the high offices to which they are assigned in organic and in brain life. Well ventilated sleeping apartments are, of course, indispensable.

Dryness of the pulmonary tissue deranges the relation of the acids with the sodium; but this very dryness may result from imperfect expansion of the lungs and want of exercise of the pulmonary parenchyma. Deficiency of nerve power in the pneumogastric nerve induces quiescence of the apices of the lungs, prevents a requisite supply of oxygen from being inhaled, induces the dryness referred to, breaks up the connection between the phosphoric and the carbonic acids with the sodium of the blood, deranges the digestive functions, thereby inducing the evolution of butyric acid—the deranged relation of the oleaginous and albuminous elements of the food, and the deteriorated and sickly leucocytes, which aggregate together and constitute the morbid growth, tubercle.

If deficiency of phosphorus be intimately associated with deficiency of nerve force, and deficiency of nerve force sustains a direct connection with the functional lesions in which tubercle is developed, phosphorus, upon the absence of which brain and nerve lesions are dependent, would seem *a priori* to be the proper element to return to the system in order to remedy the deficiency. The phosphoids of the brain are cerebric acid, cerebrate of sodium, the cerebrate of calcium and the cerebrate of ammonium. These, with an albuminoid body, constitute the kephaline. The remedial agent I first used, based on this theory of consumption, was brain protagon, containing kephaline, lecithene and myeline, with isolated cerebric acid as its solvent. Embodying these phosphoids in their normal formula, it returns to the system the missing element, and thus compensates for the deficiency. As a restorer of deficient nerve power, I can speak of it in high terms, being surpassed by no agent, except the solution of kephaline in glycerine, to which protagon must yield the palm.

On May 10th, 1859, I administered the fish protagon in pri-

vate practice, for the first time, in Frederica, Del., to Mrs. Jane P. She had cough, night sweats and diarrhœa previous to coming under my charge. Percussion evinced considerable dullness over the apex of the left lung, and auscultation revealed the presence of a small vomica. I mixed the protagon with glycerine and tincture of iodine, in the proportion of one of the protagon to eight of the completed mixture. I also gave her cod liver oil. Under this treatment she slowly improved, and by the first of January, 1860, was apparently well. She some time afterwards gave birth to a child, and soon succumbed to phthisis in the hands of my highly esteemed friend, Dr. Albert Whitely, now living at Frederica.

I also tested it in a case of acute consumption in the fall of 1859, in the same town. The lungs were badly stuffed with albuminoid deposits, which rapidly underwent tyrosis, and death soon supervened. If protagon was of any use in the last case, the benefit was only temporary—we may say it was unsuccessful. But since then, I have tested it whenever opportunity offered, and am now convinced that it is a very important accompaniment of cod liver oil in tubercular disease; that under their combined use, many cases taken care of in the early stages, without strongly inherited tubercular diathesis, may be permanently cured.

Protagon is, however, a much less elegant preparation than the glycerite of kephaline. The former contains brain principles of inferior value. Cerebric acid and the cerebrates, isolated and combined in glycerine, form a combination which I find to give results hitherto unattained by any remedial agent.

Glycerite of kephaline is beautifully clear, nearly inodorous, has a slightly acid taste, and will seldom disagree with the most sensitive stomach. The formula is: Isolated cerebrate or hypophosphite of ammonium, 8 parts; ditto potassium, 3 parts; ditto calcium, 8 parts; ditto magnesium, 5 parts; ditto sodium, 8 parts; glycero-hypophosphorus acid (obtained from brain), 5 parts; cerebric acid (obtained from brain), 5 parts; glycerine (C. P.), 60 parts. The dose is about 15 to 20 drops, taken three times daily. It may be given in combination with the extract of malt, or cod liver oil and malt. The latter method is no doubt preferable, when the stomach will tolerate it. The following case illustrates its efficacy when thus combined:

Mrs. F., came under my treatment March 5th, 1877, suffering from cough, muco-purulent expectoration, general debility, and well marked emaciation. Both auscultation and percussion revealed an extensive lesion in the apex and upper lobe of the left lung. I prescribed for her Trommer's extract of malt and cod liver oil, with fifteen drops of glycerite of kephaline thrice daily. Under this treatment, she gradually improved. Her appetite became good, her digestion perfect, and even fatty food was eaten without inconvenience; her strength and flesh were regained; the lung symptoms disappeared, and on July 8, when she passed from my observation, she was apparently in perfect health.

I cannot say the recovery in this case is permanent, but, with proper care, the disease can be kept entirely in abeyance. I cannot recall another case in which absolute restoration to health seemed so fully assured in so brief a time. My case-book contains the records of over a hundred cases of incipient and even somewhat advanced cases of tubercular phthisis, in which the disease has been arrested by cod liver oil, malt extract and glycerite of kephaline, and a comfortable degree of health has since been enjoyed. These are not, however, entitled to the name of specifics. They will not do more than delay the fatal termination after the lungs are stuffed with cheesy masses, and after ulcerative action has been set up; but they will dispel all tubercular phenomena in a large per cent. of cases, if given previous to tyromatous degeneration. I know this is claiming more than can be said of any other mode of treatment; yet, my experience justifies me in asserting it. I believe both the malt and the glycerite of kephaline exert a more curative influence than does the cod liver oil; but in cases in which there is decided emaciation, or a strong tendency to emaciation, cod liver oil is indicated, and seldom fails to benefit the patient.

I have recently, however, been omitting cod liver oil in all cases in which there had not been much emaciation, and rely on the extract of malt and glycerite of kephaline. Thus far, the omission of the oil has not seemed to be detrimental to this class of patients; in fact, several have done far better without the oil than they did with it. I do not think Niemeyer, Trousseau, Aitken, Hoppe Seyler, Ziemssen, Anstie, Thompson and Webber, of Europe, or Foster, Miles and Barrett, of this country, estimate the extract of malt too highly as a remedial agent in

phthisis. When cod liver oil disagrees with the stomach and interferes with digestion, malt extract is the best substitute. The combination of the malt extract with cod liver oil forms one of the best modes of administering the latter. I have succeeded in securing the use of cod liver oil in this form after it had been rejected in every other. It also exceeds by far in remedial effects either of the agents, administered individually. In choice of cod liver oil, I very much prefer the Norwegian oil of the pale or yellow variety, to the Newfoundland oils. Unless I except the bottled oil of Marvin, which is very fine, I reject, as unfit for medicinal use, all the New England oils.

In addition to the agents above mentioned, I have used pancreatic emulsion with cod liver oil, and now and then it seems to do good.

A remedy which has been extensively used, is the emulsion of cod liver oil and lacto-phosphate of lime. If properly made, it is an excellent preparation. If the lacto-phosphate of calcium be pure, it is quite soluble in water; the water employed in making the emulsion can also be employed in dissolving the lacto-phosphate of calcium. The following is a formula I employ:

℞. Calcii lacto-phosph.,.....grs. clx
Aquæ..... ℥vj
Acaciæ..... ℥ij

Mix and add sufficient cod liver oil to make one pint; then place in a small butter churn and beat for half an hour. By this process, I obtain quite a permanent, creamy emulsion, which proves a very efficient remedy in tablespoonful doses to an adult. In infantile diseases especially, it has given me the most satisfactory results.

But in the treatment of phthisis the physician should bear in mind that the greater portion of the lesions he must encounter are the consequences of inflammation and ulceration rather than the immediate results of tuberculization. A typhoidal grade of inflammation of the lungs and bronchi does not indicate the employment of cod liver oil, malt extract or glycerite of kephaline. No judicious physician will think of employing these during high febrile excitement. He will apply such remedies as, in his experience, will most effectually control the associated disorder. For this purpose, I frequently employ the car-

bonate or the muriate of ammonia, with small doses of veratrum or aconite, until the vascular or febrile phenomena have been dispelled, and then give blue mass, camphor, quinia and belladonna until the bronchial or lung inflammation is subdued.

I do not hold the aversion, usually entertained by the profession, to the employment of mercury in phthisis. If given with quinia, I believe it is an appropriate, valuable, and perfectly safe remedy. I have employed it in hundreds of cases, and I have never witnessed a single unpleasant effect follow its use. I prefer the blue pill.

Counter-irritation with croton oil over the seat of the inflammation, is a very valuable adjunct to the internal remedies. Each attack of pneumonia leaves behind it a copious exudation of albuminoid matter teaming with leucocytes and protoplasms; and these must be absorbed, or they will become caseous, and produce the cheesy masses which play so important a part in pulmonary ulceration.

To prevent tyrosis is, then, an important indication. Tonics and antiseptics must be employed. The syrup of the iodide of manganese with quinia should be given in full doses, while the patient is allowed a liberal diet, and every means possible employed to maintain the highest possible standard of general health. A plan of treatment which, in my hands, has proved advantageous, is the following:

℞. Glycerite of kephaline.....ʒxvj
Tinct. of iodine.....ʒij
Pure glycerine, q. s.....ʒviij. M.

Sig. Teaspoonful three times a day, before meals, and a teaspoonful of the syrup phosphates of iron, quinia and strychnia after meals.

If the sputa becomes muco-purulent, and hectic symptoms are evinced, I have witnessed the most unequivocal advantage from the use of the sulphides of potassium and calcium. These agents excite suppuration, and aid in the removal of the inflammatory exudation, as also favor the absorption and removal of tubercular deposits. The value of the sulphides I first learned from Ringer's *Therapeutics*.

I need scarcely say that oxide of zinc and atropia are the most efficient remedies for night-sweats; that carbolic acid, per-

manganate of potassium and hyposulphite of sodium are required where there is much hectic fever; that acetate of lead and opium, ergot, sulphuric acid, gallic acid and chloride of sodium may be indicated in pulmonary hæmorrhage. These points are well understood.

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ART. VI.—*A Plea for the Early Use of the Aspirator in Pelvic Cellulitis.* By JOHN A. OCTERLONY, A. M., M. D., Visiting Physician to the Louisville City Hospital, Louisville, Ky. (Read before the Louisville Medico-Chirurgical Society, and published by request of the Society.)

According to the purport of this paper, the treatment of pelvic cellulitis may be conveniently regarded as two-fold in character—its object being either to diminish the intensity and extent of the existing inflammation, or to rid the patient of the products and effects of this morbid process. The treatment, then, consists of certain measures applicable before suppuration has begun, and of certain other measures properly instituted only after suppuration has been established. I propose here to call attention to only one of the latter measures—*the aspirator*—and to advance arguments and facts in favor of its earlier use in pelvic abscess than has formerly been the rule.

The plan generally recommended by authors, and adopted by physicians, is either to leave the abscess to rupture spontaneously, or to wait until there is distinct fluctuation, and the abscess points, when it may be opened with the knife without difficulty or danger. This rule of practice I followed until nearly five years ago. Since then, I have treated eight cases of non-puerperal pelvic cellulitis, in which suppuration had commenced. Some of these I treated alone, and the others in consultation. In two of these, spontaneous rupture of the abscess had already occurred when first seen by me. In all the other six cases, the aspirator was used, and all recovered. On comparing the earlier cases with the more recent ones, I find that the latter, in which the aspirator was used, have given better results than the former, in which the abscess ruptured spontaneously, or was evacuated by means of the knife. This favorable experience has induced

me to regard the early use of the aspirator as an important improvement in the treatment of pelvic cellulitis after the suppurative stage has set in. The advantages of this plan of treatment appear to me to be:

1. *It is attended with very little pain.* Therefore it is not necessary to bring the patient under the influence of an anæsthetic, unless she is exceptionally nervous or excitable.

2. *Ease of application.* The introduction of the aspirator needle, even when the abscess is seated high up in the pelvis, or lies at the brim, is accomplished with great ease, and never requires the aid of a speculum, as when the bistourie is used.

3. *Marked and immediate relief from pain and pressure symptoms.*

4. *Reduction of fever.* This is always a desideratum where fever runs so protracted a course as it does in this disease. Immediately after aspiration, there may be a temporary rise of temperature; but this is speedily followed by a marked fall of much longer duration, and which may prove permanent.

5. *The operation is slight and entirely free from danger, and may, therefore, be repeated without hesitation whenever evacuation is needed.* This much cannot be said for the knife, even when the pus lies near the surface and an incision is made per vaginam or per rectum. Simpson mentions cases in which, under such circumstances, serious hæmorrhage ensued.

6. *With the aspirator the point of opening is determined by the operator instead of being left to chance.* At first this may appear of little or no importance, but it is far from being so. Dr. Savage, reporting the points of opening, spontaneous and artificial, in 19 cases of pelvic cellulitis, shows that not a single death occurred when the abscess opened on the external integument, or into the vagina, but all the fatal results took place when it opened elsewhere.

7. *The danger of rupture into the perineal cavity is averted by the early use of the aspirator.* It has been urged as a reason for non-interference in these cases that rupture into the perineum is a very remote possibility. Schroeder remarks: "If suppuration has commenced, it is unnecessary to take any pains to find the pus, since the abscess is not apt to perforate into the abdominal cavity, but generally breaks at some favorable point."

Such teaching I believe to be erroneous and dangerous. Three out of Dr. Savage's nineteen cases died from rupture of the abscess into the peritoneum. I have myself observed two such results, and have heard of similar results in the practice of others. Rupture into this cavity is, therefore, no imaginary but a very real danger. *Evident pointing of the abscess toward a favorable locality, like the external integument, or the vagina, does not* confer safety upon the patient against internal rupture. The truth of this is forcibly illustrated by the following case related by Sir James Y. Simpson in his work on *Diseases of Women*, pp. 251 and 252:

"I feel perfectly sure that in any case it is better carefully to watch the progress of the suppuration, and to take it into your own hands, to make a proper artificial opening for the discharge of the abscess, in a safe and suitable situation, than to leave the guidance of it to nature, and to run the risk of seeing the purrulent collection burst in some dangerous or disagreeable locality. By making a *prompt* and judicious opening into a pelvic abscess, you may even in some cases save your patients' lives. One of the earliest cases of pelvic cellulitis that I saw occurred in a patient whom I watched in the lying-in hospital, along with Dr. Ziegler. The inflammation had extended down lower than usual, to the cellular tissue lying between the rectum and the vagina, and had led to the formation of an abscess which had begun to point towards both of these canals. Such was the state of matters one day when we examined the patient; and we both decided that it was of no use to make an artificial opening, as it seemed certain that the matter must speedily find an exit for itself, either into the canal of the rectum or the vagina. And certainly within four and twenty hours from the time we made our examination, the abscess did burst; but we found to our dismay that, instead of opening on one of these mucous surfaces to which it pointed so distinctly, the abscess had burst into the peritoneal cavity, where the effused pus had given rise to intense irritation, and lighted up a peritonitis that proved rapidly fatal."

8. *The extent of the abscess and the disorganization of surrounding tissues can be much diminished by the early use of the aspirator.* It is true, pus may re-accumulate and render it necessary to repeat the procedure several times. In one case, I tapped a pelvic abscess three times, and in another case, after repeated aspiration, it was necessary to establish permanent drainage. But, if the correctness of my previous argument be ad-

mitted, it follows that such repetition is not to be dreaded by either operator or patient.

9. *The duration of the illness is shortened by the use of the aspirator.* It is difficult to speak with absolute certainly on this point. But I am sure that my earlier cases ran a more protracted course than those more recently treated, in which the aspirator was used as soon as I could make out the presence of pus.

10. *Complications, such as metritis and peritonitis, are not so likely to arise.* Sequelæ like disorganization of the ovaries, chronic sinuses, permanent displacements of the uterus, &c., are not likely to be so serious when the aspirator has been used early in the suppurative stage. Certainly the most formidable complications were observed by me in those cases where evacuation had been delayed until very late or was not resorted to at all—spontaneous rupture effecting a tardy and incomplete removal of the pus.

How early shall aspiration be performed? I would say as soon as the presence of pus can be made out. The faintest sensation of fluctuation or bogginess of the fornix vaginæ indicates the immediate use of the aspirator. The objections made to the too early use of the knife do not hold good against the aspirator. It has been said the abscess must not be opened too early, because there is usually more than one collection of pus. If the case be left to itself long enough, these several accumulations will coalesce, so that one opening will suffice to empty them. If the knife be used too early, the operation will have to be repeated; if it be delayed, the tissues lying between the pus and incised surfaces are broken down, and the formation of sinuses will be prevented. Too early incision may be wrong; it may be painful and dangerous to the patient—difficult and troublesome to the practitioner; but the early use of the aspirator is neither the one nor the other. If resorted to before the multiple collections of pus have merged together, the suction of the instrument will promote such an event; and this I have witnessed myself more than once. The breaking down of tissues intervening between the abscess and the surface, the destruction of neighboring organs from pressure and implication in the inflammatory process are evils, and the early use of the aspirator tends to prevent them.

My experience teaches me that pus burrows, and sinuses form more frequently when the abscess empties spontaneously or is opened late, and that it is especially in these cases that sinuses become chronic and are most difficult to cure.

Method of Operating.—As a preliminary measure, the patient's bladder should be emptied by means of the catheter, and the rectum should be cleared with an enema. This is a precaution of sufficient importance to be insisted upon, for a neglect of it has led to the wounding of the bowel or bladder. West (*Diseases of Women*, 2d ed., p. 320) relates a case where the trocar entered the bladder through the firm and œdematous vaginal wall; the accident fortunately was not followed by any bad consequences. Other instances of like mishaps have been related to me by friends. If the aspirator is used, the danger of such an occurrence is much lessened.

The patient should be placed across the bed, in the position for applying the forceps, the buttocks brought down to the edge. An assistant takes charge of each knee; a third should steady the abdomen, although the inflamed mass is usually quite fixed and immovable. The operator, seated in front of the patient, introduces one or two fingers of one hand into the vagina, locates the lowest point of the tumor, and directs the point of the needle, which is quickly pushed in the purrulent accumulation with the other hand. A fourth assistant, meanwhile, works the air syringe until all the pus has been slowly drawn off. It may be necessary to partially withdraw the needle or to plunge it still deeper into the swelling, or to turn the point in different directions before the pus cavity is found. It should not be forgotten that the employment of the aspirator is an exploratory as well as a curative measure, and that, if recourse to it has been premature, and no pus is found, its use is not likely to do any harm. But if suppuration has begun, the use of this instrument will prove of great benefit to the patient.

I believe that, as the aspirator becomes more generally employed, the profession will freely admit all that I have alleged in favor of its early use in pelvic cellulitis.

ART. VII.—*Analysis of Fifty Consecutive Obstetrical Cases.* By MERRIWETHER LEWIS, A. M., M. D., Lenoir, Tenn.

From a careful analysis of fifty obstetric cases, divided into five successive series of ten each, I find results as shown by the following tables:

Table I—Presentations and Positions.

Number of first vertex positions	35
" second " "	3
" third " "	5
" first face "	3
" first shoulder "	2
" first breech "	2
Total	50

Table II—Operations.

Number of forceps cases	5
" podalic version cases	4
" cephalic " "	1
Total	10

I am aware that the foregoing table, with its twenty per cent. of operations, bespeaks a *cacöethes operandi*, and is open to criticism. Nevertheless, I had rather operate too soon in ninety and nine cases, than lose one mother or one child by operating a moment too late. Besides, the propriety of operating is fully sustained by the results of the following table:

Table III—Mortality.

Mothers	None
Children, from syphilis (*in utero*)	2
" " pressure upon the cord	1
Total	3

In the two syphilitic cases, the shoulder presented, and delivery was accomplished by podalic version. Each child had been dead so long, *in utero*, that the skin slipped from the ankles when grasped, and the anterior surface of the bodies was pretty well denuded of cuticle. The death from pressure upon the prolapsed funis could have been easily prevented but for the cursed slowness of a messenger dispatched for my forceps. They reached me a few minutes after pulsation had ceased in the cord, when delivery was rapidly effected, and artificial respiration employed, but without success. Had I expected to encounter an obstetric case, I would have taken my forceps, and a life would

have been saved. What a lesson this should be to those physicians who not only do not carry forceps in their midwifery practice, but do not even possess a pair on which to fall back in case of emergency! But what I wished to show was that not a single death occurred from any of the ten operations, although I was young and inexperienced, and had assistance in only two cases, in one of which a physician, and in the other a lady, were kind enough to administer chloroform while the forceps were being used.

In connection with these remarks, I would say boldly, for boldness and truth go hand in hand, that for a physician to hesitate and delay until a consultation can be held, or assistance arrive, while he sees the use of the forceps indicated in order to save life, displays a most culpable timidity, a timidity born of ignorance and a total want of self-confidence. And yet, such is the course advocated by a number of authors, and practised by many physicians.

The reader will perhaps pardon me for transcending the limits of this article, and relating, as ministers and politicians do, an "anecdote," illustrating the foregoing statement.

In a certain city in Kentucky, not a hundred miles from her great medical centre, Louisville, two old and orthodox physicians met in the lying-in chamber. They consulted long and formally according to the code and the traditions of the "Fathers." Rigby and Meigs and "our own Dewees" were quoted and referred to. In vain they tried to hide behind the old and *hateful maxim* of "meddlesome midwifery;" it was a ground-hog case, as we country doctors say, and the dreaded forceps had to be used. But such was their dread of the operation that each refused to perform it singly. The responsibility was, accordingly, divided in the following ingenious manner. One held the handles of the instrument, while the other, standing as near as his portly belly would admit, grasped the lock and the shanks of the blades. The case proved a success, but alas! contention sprang up between them, each claiming himself to have been *facile princeps*—in short, that the glory of the affair was *his*, and his alone. Each charged the other with being drunk during the operation (no doubt their terror required Bourbon), and in two weeks

neither would recognize the other as a physician or gentleman. Ludicrous as this scene was, it has, no doubt, been often reënacted in a less pronounced style by many of our timid professional brethren.

Before dismissing this subject, I cannot help expressing my conviction that, within the next twenty-five years, the use of the forceps will become the rule, and their non-use the exception. For general use in obstetric practice, the light forceps of Dr. W. H. Newman, of Denver City, will meet all the requirements in lingering, but otherwise normal labors; while the excellent heavy instruments of Hodge, Elliott and others, leave nothing to be desired in more difficult cases. Medical students, while attending lectures, should be compelled to become perfectly familiar with their use, by long and careful practice upon the manikin. Otherwise, as a rule, they commence practice so ignorant of their practical use, that they not infrequently have to expose their patients before they can introduce and lock the blades.

Table IV—Ages of Parents.

Fathers—1st series of ten						319	years
"	2d	"	"			320	"
"	3d	"	"			304	"
"	4th	"	"			356	"
"	5th	"	"			305	"
				Total age		1604	"
Mothers—1st series of ten				283	years		
"	2d	"	"	237	"		
"	3d	"	"	270	"		
"	4th	"	"	292	"		
"	5th	"	"	243	"		
				Total age	1325		
Added ages						602	years
"						557	"
"						574	"
"						648	"
"						548	"
				Total added ages		2929	"

The difference between total ages of fathers and mothers is 279 years. In seven instances, I found boys of scarcely twenty years united to women who were decidedly on the wrong side of thirty. The condition of the families in each instance was one of abject poverty, strongly suggestive of the idea that the parties had entered the marriage relation in sheer desperation, believing, as the poor Irish do under similar circumstances, that their condition could not be rendered worse, and might be made better.

Table V—Average Ages of Parents.

Fathers.		Mothers.		Added Average.	
In 1st series..	31.9 yrs.	In 1st series.....	28.3 yrs	In 1st series.....	30. 1 yrs
2d " ..	32.0 "	2d "	23.7 "	2d "	27.85 "
3d " ..	30.4 "	3d "	27.0 "	3d "	28. 7 "
4th " ..	35.6 "	4th "	29.2 "	4th "	32. 4 "
5th " ..	30.5 "	5th "	24.3 "	5th "	27. 4 "
Total ave'ge..	32.2-25 "	Total av'ge.....	26.5 "	Av. both sexes.	29.29 "

It is a fact of no little interest that the average age at which men, in this section of the country, become fathers, is about 32 years, the period of maximum development and perfection of physical power. It will be observed that the ages of the parents reaches the maximum in the 4th series of ten, and the minimum in the 5th. The significance of these facts will appear from the subjoined table:

Table VI—Sex of Children in each Series.

Males—1st series.....	5	Females—1st series....	5	Per cent. of males.....	50
" 2d "	6	" 2d "	4	" "	60
" 3d "	5	" 3d "	5	" "	50
" 4th "	9	" 4th "	1	" "	90
" 5th "	2	" 5th "	8	" "	20
Total No. males.....	27	Total No. females...	23	Total per cent.....	54

Comparing these results with Table V, we notice, with interest, that in the 4th series, in which the ages of the parents reaches the maximum, the number of male children is also at the maximum, being 90 per cent. of that series; and that in the 5th series, in which the age is at the minimum, the number of female children is at a maximum, or 80 per cent. of the entire series.

Do not these facts point significantly to *age* as being an important factor in the determination of sex? But I pass on, for other and equally important facts are disclosed by the next table:

Table VII—Average Weight of each Series of Ten at Birth.

	Pounds.		Pounds.		Pounds.
Males in 1st series	42	Females in 1st series	45⅜	Added weight.....	87⅜
" 2d "	60½	" 2d "	33	" "	93½
" 3d "	46¾	" 3d "	45¾	" "	92½
" 4th "	75¼	" 4th "	8½	" "	83¾
" 5th "	20	" 5th "	66	" "	86

Total weight of 27 males, 244½ pounds; Total weight of 23 females, 199⅝ pounds; Total added, 443⅛ pounds.

Average weight of males, 9.3-54 pounds; Ditto females, 8.125-1841 lbs.

General average weight in both sexes, 8.13-15 pounds.

A strange fact brought out by this table is, that the 4th series, all with one exception males, is the minimum series in weight. On investigation, however, I find this accounted for by the small average size of the parents. The parents of the second series are of much larger average, and hence this series reaches the maximum weight of 93½ pounds.

In order to show the influence of fœtal weight upon the progress of labor, I subjoin the following table, premising, however, that its results are somewhat vitiated by the operations given in Table II:

Table VIII—Duration of Labor.

In 1st series	154 hours	Average duration	15.4 hours
2d "	210 "	" "	21.0 "
3d "	111 "	" "	11.1 "
4th "	75 "	" "	7.5 "
5th "	77 "	" "	7.7 "
Total duration	627	Total av. duration	12.27-50

I have estimated labor always from the first regular pains felt by the patient to the extraction of the placenta. As I have never witnessed the normal expulsion of the placenta, but have always extracted it within ten minutes after the birth of the child, by introducing the hand, or by the method of Credé, I cannot give the natural duration of the third stage of labor. The average duration of the first stage was 11 hours, of the second, 1⅖ hours, of the third, hour.

By comparison with Table VII, it appears that the second series, being the maximum in weight, corresponds to the *second* of this, which attains the maximum of duration. The 4th series, presenting the maximum of males and the minimum of weight, has, also, the minimum of duration. The average duration of the fifth series, with its 80 per cent. of females, was 7.7 hours, showing the facility with which the small heads of female children are born. Hence we see that Nature, our true *Alma Mater*, "tempers the wind to the shorn lamb," and generally imposes upon the young and inexperienced mother the lighter task of giving birth to a female child.

We have all noticed, no doubt, the sublime confidence with which many women calculate and predict the very day and hour of their approaching confinement. Let us examine briefly in the following table how near they come to the facts:

Table IX—Difference between Expected and Actual Time of Confinement.

Difference in	1st	ten cases	113 days
"	2d	"	36 "
"	3d	"	31 "
"	4th	"	80 "
"	5th	"	41 "
Total difference		291 days	Average difference 5 41-50 days

It is not a little amusing to notice that the second or youngest series of mothers made the nearest approximation to the actual time—missing it by only 2.6 days. It were a consummation most devoutly to be wished that women could learn to be more accurate in this respect. In the meantime, however, we must pardon them for often keeping us in terror of their sending forth on dark and stormy nights, for they are not yet posted in regard to the physiological law, that ovulation and menstruation do not always go hand in hand. Indeed, were this law more generally known, there would be fewer "time tables" in domestic use; there would be a less demand for almanacs; and far fewer accidents would happen in well regulated families.

In order to make this analysis complete, the number of children living at the time of confinement is given in the subjoined table:

Table X—Number of Living Children at Time of Confinement.

In	1st	series 25
	2d	" 6
	3d	" 23
	4th	" 23
	5th	" 15
Total number living children		92
Average " " "		1.21-25

Sixteen of the entire fifty cases were primiparæ, and the average number of pregnancy was $2\frac{3}{4}\frac{4}{5}$. In two of the above cases, puerperal convulsions occurred. In seven cases, there was considerable *post partum* flooding; in eleven, the cord was around the child's neck; in three, the cord prolapsed before the head, and twice before the breech. There was one indubitable case of the "globular contraction" of Ramsbotham, and three cases of hour-glass contraction.

In forty-seven cases, the fluid extract of ergot was given, but without any appreciable effect. I still administer it, however, in half-ounce doses, immediately before delivery, believing it to exert a controlling influence over the circulation, and *hoping*

that it aids in sustaining the tonic contraction of the emptied uterus.

In three cases, chloral hydrate was used for mitigating the dilating pains, with excellent results. The placenta was removed manually, by the *vis a fronte* (introducing the hand) in forty-five cases. In five cases, the placenta was removed by the method of Credé with such facility, and such excellent results, that I have ever since, for a period of over two years, employed no other method; and I am perfectly satisfied that such will be the course of every physician who once acquires the knack of expressing the placenta.

As a general rule, the cord was tied within two minutes after the birth of the child, although now I usually wait as long as ten minutes before proceeding to ligate the cord and express the placenta. I think this delay best for reasons too obvious to be mentioned here, especially as they lie beyond the scope of a mere analytical article.

Such articles are generally dull, and the least read, but they are none the less useful. Indeed, I cannot close without expressing the wish that analytical papers were more common from the pens of general country practitioners. Were such the case, medical opinions and conclusions would no longer be deduced so exclusively from mere city and hospital practice, but would be modified and rendered more accurate by the influx of thousands of carefully recorded cases from the whole length and breadth of our great Republic.

ART. VIII.—*Recent Progress in Syphilology.* By GEORGE H. ROHE, M. D., Baltimore, Md.

The question of the **Unity or Duality** of the virus producing the different varieties of the venereal sore has been recently discussed by Mr. J. L. Milton,* of London. From the consideration of a small number of his own cases, and criticism of a number of cases reported by others, Mr. Milton concludes that the duality of the venereal virus is an established fact. Considering that a majority of the foremost syphilologists in England and

N. Y. Med. Record, April 7–14, 1877.

Germany, and not a few in this country, hold opposite opinions, and probably upon equally good grounds, the question can hardly be regarded as settled.

Strong ground in favor of the existence of a **True Syphilitic Gonorrhœa** is taken by Mr. Henry Lee, in the Hunterian Lectures* delivered by him before the Royal College of Surgeons in 1875. The experiments of Prof. Tarnowsky, of St. Petersburgh, who succeeded in producing syphilitic infection by means of the blenorrhœic matter from syphilitic patients, gives considerable support to this view. Not a few American surgeons, among them Prof. Gross, hold the same opinion.

Whether **Induration of the Initial Lesion** occurs prior to constitutional infection, or whether it is an indication of such infection having taken place, is considered by Auspitz.† He gives a detailed account of 33 cases of indurated chancre, in which the initial lesion was excised at various times (4 days to 7 weeks) after the first appearance of the morbid process. The following results were obtained: The wound healed by first intention in six cases. Partial healing by first intention took place in twelve cases. In none of these eighteen cases did induration recur in the cicatrix. In the remaining fifteen cases, the cicatrix became indurated. In fourteen cases, no constitutional syphilitic symptoms appeared after a sufficiently long interval of observation after the excision. In nine cases, constitutional syphilis occurred despite the excision. In the remaining ten cases, the result, owing to insufficient length of time for observation, and other causes, remains doubtful. From the results obtained in these cases, Auspitz concludes that the initial induration is not an expression of constitutional syphilis, but on the other hand the real *dépôt d'infection*, from which the organ is saturated with the virus.

The excision was usually performed by seizing the induration with a vulsellum, raising it from the surrounding healthy tissue, and cutting the button out with a pair of curved scissors. The edges of the oval wound were then united with sutures or adhesive plaster.

The Hereditary Transmission of Syphilis has lately been in-

Lectures on Syphilis. Philadelphia, 1875.
†*Vierteljabressch. fur Derm. and Syphilis.* 1 & 2, 1877.

vestigated anew, with, as yet, no definite results. Dr. J. E. Atkinson* considers the question from a histological point of view, and arrives at the conclusion that, from the biological relations of the sperm- and germ-cells to epithelium and white blood-cells, syphilis may be transmitted by either parent. In an excellent report of two cases observed by himself, Dr. R. W. Taylor† thinks himself justified in concluding that "syphilis may pass from father to offspring while the mother remains unaffected." The careful and complete report of these cases certainly appears to be pretty positive evidence. Kassowitz‡ enters into by far the most extensive investigation of the subject, and concludes from his researches that syphilis may be transmitted by either parent, the other remaining unaffected. Keyfel§ endeavors to prove that the offspring may be infected with semen from a syphilitic father, and the mother escape the infection. Owing to the incomplete manner in which his cases are reported, however, his statistics are not of much value as testimony. Diday‖ also tries to establish his favorite theory of infection of the mother through the fœtus; but the simple non-observance of primary lesions on the woman surely cannot be considered, in the nature of positive proof that she did not obtain her syphilis by the usual road! Oewe¶, after the careful examination of a large number of cases occurring under his observation, concludes as follows: (*a*), Fathers suffering from latent constitutional disease have no direct part in the development of hereditary syphilis; (*b*), the children of such fathers are healthy; (*c*), hereditary syphilis invariably supposes an infected mother; and (*d*) syphilitic semen does not exert any influence on the maternal organism, either directly or indirectly (by pregnancy).

Sturgis** reviews the question, taking the above mentioned brochure of Kassowitz for a text, and points out clearly the fallacies which the advocates of the direct paternal transmission of syphilis fall into. After a careful consideration of the whole subject, it seems to the present writer that the weight of evidence

N. Y. Med. Jour., Jan., 1875. (Reprint.)
†*Archives of Clinical Surgery*, Sept., 1876. (Reprint.)
‡*Die Vererbung der Syphilis*, Wien, 1876. (Brochure.)
§Abstract in *Archives of Dermatology*, III, 2.
‖*Le Progrès Med.*, Sept., 1876.
¶Abstract in *Archives of Dermatology*, III, 2.
**Chicago Med. Jour. and Exam.*, June, 1876. (Reprint.)

rests with those who deny the direct transmission from the father, and that satisfactory proof has not yet been furnished that a syphilitic child can be born without previous infection of the mother.

Attention has recently been called by Fournier,* Rollett,† and others, to the importance of recognizing the influence of **Syphilis as a Factor in Phthisis.** Fournier sums up the anatomical points of distinction between tubercle and syphiloma of the lungs as follows:

1. Situation: Tubercle involves upper part of both lungs; gummata one lung, and may be limited to a portion.

2. Number: Gummata are few, as a rule; solitary tubercle sooner or later become confluent.

3. Gummata are larger than tubercles; never miliary in form.

4. Color: Gummata are always white or yellow—never transparent like miliary tubercle.

5. Consistency: Until softening takes place, the gumma is of more equal consistence than tubercle, and when it softens, does not break down wholly, owing to the capsule.

The diagnosis is difficult. Attention is called to the fact that a remarkable tolerance of the disease is sometimes seen, in which event the patient retains his flesh and strength to a considerable degree. Another point of distinction is its slow evolution, whereas it is rapid in tuberculosis. The following conclusions are offered:

1. Tertiary syphilis can produce, in the lungs, lesions which, either locally or by reacting on the general system, simulate pulmonary phthisis.

2. These lesions are often amenable to treatment; however grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently, when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis can be certainly made out, to ascertain if the lesion can be traced to syphilis. It is necessary to remember that syphilis is a possible cause of phthisis.

4. When syphilis is suspected of being the cause, the primary

*Abstract in *Archives of Dermatology*, III, 2.
†*Wiener Med. Presse*, November 21, 1875.

indication is to prescribe specific treatment, as such has been known to produce gratifying results.

An important practical contribution to this subject is the report of five cases by Dr. L. McLane Tiffany*—the first case, as far as known to the present writer, reported by an American surgeon.

On Syphilis of the Brain and Nervous System.—The monograph by Heubner† is at once the most comprehensive and the most complete upon the subject in the language. Monographs and clinical reports have also been published by Buzzard,‡ Broadbent, Fournier, Wunderlich,§ Erlenmayer,‖ Taylor and others. The possibility of syphilis acting as a cause of psychical and nervous disturbances must be borne in mind in obscure cases. The treatment most successful is iodide of potassium in large doses.

In a paper on **"Early Syphilis in the Negro,"** Dr. J. E. Atkinson¶ gives the results of 100 cases observed by him in that race. The subject discussed by the author is of great importance to every physician practising in the South, and is handled by one who is fully conversant with it in all its details. The article is so much condensed that an abstract of it within the limits at our command is impossible.

The Treatment of Syphilis by means of the Hypodermatic Injection of mercuric bi-chloride (Lewin), chloro-albuminate and mercuric peptone (Staub, Bamberger, Grünfeld, Neumann, &c.), and calomel (Köilliker), has lately been extensively pursued by the authors named, and superiority claimed for each of them. The difficulty of applying this method in private practice, and the disagreeable results—as abscesses and circumscribed dermatitis—which not unfrequently occur, will necessarily limit its application. The veteran syphilidologist, Sigmund, on the other hand, in a recent lecture,** reviews the new methods of treatment, and concludes that subcutaneous injection is only suitable

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*Syphilis of the Lung: *Am. Jour. Med. Sci.*, July, 1877.
†*Ziemssen's Cyclopædia*, vol. 12. 1877. N. Y., W. Wood & Co.
‡*Syphilis of the Nervous System.* London, 1875.
§*Ueber Luetische Erkrankung des Gehirns, Volkmann's Sammlung*, No. 93.
‖*Die luetischen Psychosen, &c.*, 1877.
¶*Maryland Medical Journal*, August, 1877.
**Wiener Klinik*, Oct., 1876. *Schmidt & Jahob.*

in mild cases, and that in severe cases he always relies with more certainty upon the old methods.

Of decided novelty are the views of Keyes* upon **The Action of Mercury.** By examining the blood with a measuring apparatus known as *the hématimétre*, he found that mercury in small doses, in health or disease, increases the red globules. He has arrived at the following conclusions, among others, as the result of experiment:

"Syphilis diminishes the number of red corpuscles below the healthy standard.

"Mercury in small doses, continued for a short or long period in syphilis, alone or with the iodide of potassium, increases the number of red corpuscles in the blood, and maintains a high standard of the same.

"Mercury, in small doses, is a tonic to individuals in fair health—not syphilitic. In such individuals it increases the number of red blood corpuscles."

Drawing these conclusions from his investigations and clinical experience, Keyes was led to adopt what he terms the "tonic treatment" in syphilis. This consists in beginning with very small doses of mercury ($\frac{1}{10}$th gr. corrosive sublimate, $\frac{1}{8}$th gr. proto-iodide, $\frac{1}{2}$ gr. blue mass), three times a day, and increasing the same—carefully watching its effects—uptil the constitutional effect of the medicine (abdominal pains, diarrhœa, slight stomatitis) are manifested. This is termed the "full doses." When this is ascertained, it is continued until the symptoms for which mercury was administered have disappeared, when the dose is diminished one-half—this is the patient's "tonic dose." This is continued steadily from two to two and a half years. Where rapid action is necessary, to obtain the effect of the "full dose," inunction or the mercurial vapor bath may be combined with the internal administration of the remedy. Of course the general condition of the patient as to diet, hygiene, &c., is not neglected.

In common with nearly all syphilidologists of the present day, Keyes advocates the use of mercury altogether in the early stages of syphilis; the "mixed treatment"—mercury and iodides—in late secondary eruptions, and the iodides in the gummy lesions

**The Tonic Treatment of Syphilis.* N. Y. D. Appleton & Co., 1877.

wherever occurring. In this stage—tertiary—the author's faith in the iodides is strong, and is manifested in this apotheosis of the potassium salt:

"Under the kindly influence of iodine, unsparingly pushed, the node melts away, the gummy tumor becomes absorbed, the spreading ulcer blushes with healthy granulations, the palsied muscle regains its contractibility, the veil drops from the clouded intellect, the maniacal paroxysm is followed by peace.

"No means in the physician's hands place him so near the Deity as the iodide of potassium. With it, in well-selected syphilitic cases, he can sometimes almost effect a resurrection. Wasted and lost functions are restored; the mind, the memory, the speech, the hearing, the sight, the taste, the touch—all may be recovered by its aid. The prognosis in the most desperate conditions is always infinitely better where syphilis can be made out as having caused the trouble, than where any other diseased condition is at fault; and no amount of destructive tertiary disease need occasion despondency so long as the integrity of the stomach can be preserved, and the physician is strong in his faith in iodine and expert in his methods of using it."

That Dr. Keyes is not a homœopathist in his use of this drug, we may gather from the statement that he has "given *an ounce a day* of the iodide of potassium (℥ij every 6 hours) in several cases with advantage." He adds, however, "it is very exceptional to give such large doses."

Notwithstanding the clear directions given by Dr. Keyes, and the undoubted superiority of his plan in some cases, it may be doubted whether it will supersede the old-fashioned methods, and especially the effective inunction cure, combined with the internal use of iron and, in the late stages, the iodides.

Bailbache* gives a good summary of the history and treatment of syphilis and the so-called chancroid. His recommendations for the prevention of venereal diseases would, if adopted, be a long step on the road of progress, although falling short of what we think is not only desirable, but practicable. We think the attempted mollification of the pietistic elements of society is out of place in a scientific work in our day. Things should be

*Syphilis and Chancroid. Reprinted from Annual Report Supervising Surgeon-General U. S. Rev. M. for 1875.

called by their right names. Let us not employ false pretences. When we mean "the legal and sanitary control of prostitutes," let us say so, and not attempt to hide our meaning under a more ambiguous, though perhaps less offensive, phrase.

Correspondence.

American Pharmaceutical Association.

Mr. Editor,—Thinking that a short letter detailing some of the proceedings of the "American Pharmaceutical Association," now in session in this city, would be interesting to your readers, I have concluded to drop you a few lines.

The 25th annual meeting of this Association (which has on its roll over 1000 members) was called to order in the City Council Chamber, by the President, Mr. Bullock, of Philadelphia, at 3 o'clock P. M., Tuesday, Sept. 3d, 1877. The Mayor being absent from the city, Alderman Wright represented him, and made a short address of welcome, which was replied to by Mr. Bullock. About one hundred delegates and members were present.

After some preliminaries of organization, the President read his annual address. Commencing with a reference to the fact that this Association had just reached the first quarter of a century of its history, and alluding to its large membership, and also to the fact that this was the first time that they had ever met outside of the boundaries of the United States, he passed on to a review of the History and progress of pharmacy, tracing it back to its earliest beginning.

The reports of the Permanent Secretary, Prof. J. M. Maisch, and of the Chairman of the Executive Committee, both very interesting to pharmacists, were then read. Some invitations to entertainments presented from the Ontario College of Pharmacy and Toronto druggists, were read and accepted; and this about finished the business of the first session.

Owing to the great distance, and the expense involved, the Southern States were not well represented. South Carolina had only one representative (Mr. Heinitch, of Columbia); Virginia two (F. H. Masi, of Norfolk, and T. R. Baker, of Richmond); Georgia three (Mr. Tarrant, of Augusta, and Mr. Ingalls and

Mr. Menard, of Macon); and Kentucky only one (Prof. Diehl, of Louisville). The Western States did not turn out well, but the Northern, Eastern and Middle Atlantic States were well represented.

To those who have yet to visit Toronto, I will say they may be prepared to see a very handsome city, well built, and regularly laid out. The public buildings are massive, very large, and very fine specimens of architecture.

At the opening session of the Association, a resolution was passed inviting the Faculty of the University of Toronto, and the medical profession of the city, to attend the sessions of the Association.

At the second session of the Association, the nominating committee reported the names of officers for the ensuing year, which were duly elected. Mr. Wm. Saunders, of London, Ontario, was elected President for the ensuing year; Mr. Ewen McIntire, of New York, first Vice President; Mr. John Ingalls, of Macon, Ga., second Vice President, and Mr. Emlen Painter, of San Francisco, third Vice President.

The standing committees, such as the Committee on the Drug Market, on Papers and Queries, on Prize Essays, on Legislation, &c., were all reorganized as usual.

Dr. Wilson H. Pile, of Philadelphia, Chairman of Committee on Adulterations and Sophistications, read a very interesting report.

By the way, on the morning before the final adjournment of the meeting, at 4 o'clock, this old gentleman was visited with a stroke of paralysis, which rendered him helpless but not speechless, and his calls for assistance could only be responded to by getting through the opening over the top of his chamber door. The physician who was summoned to attend him said he would recover.

On the second day, the Mayor, who had returned to the city, entered the hall, amidst great applause, and proceeded to address the meeting, apologizing for his unavoidable absence from town at the time of the opening of the meeting, tendering the hospitalities of the city, &c.; after wishing the members of the Association a pleasant meeting, he retired.

Considerable time was occupied at all the sessions of the Con-

vention in reading essays, replies to queries, and special reports, and in discussions thereon. The subject of the revision of the Pharmacopœia, which you remember was tabled at the last meeting of the American Medical Association, came up yesterday in the regular order of business. Dr. Squibb made a few remarks concerning his connection with the subject. He had advocated a revision of the Pharmacopœia in the past, but now he was content to let the matter rest. He would be satisfied with any pharmacopœia adopted by the Association. He said his efforts in behalf of a new pharmacopœia had proceeded from the purest motives, and his motives had been misconstrued and himself abused until he was disgusted, and would have nothing more to do with it. Mr. Sheppard, of Boston, rose and said, that from his youth he had learned to look upon Dr. Squibb as high authority, both in medicine and pharmacy, and to honor him for his great integrity of character. He then offered the following resolution, which was unanimously agreed to, viz: "*Resolved*, That while there is among the members of the American Pharmaceutical Association an honest difference of opinion as to the advisability of the plan suggested by Dr. Squibb for the revision of the U. S. Pharmacopœia, the thanks of the Association be, and are hereby tendered to Dr. E. R. Squibb, of Brooklyn, N. Y., for his earnest efforts during the past two or three years to inaugurate an improvement in the plan of revision of the U. S. Pharmacopœia." Dr. Squibb rose and gracefully thanked the Association for the compliment paid him in this resolution.

A committee of five was then appointed to consider and report a plan of action with reference to the revision of the pharmacopœia. This committee recommended that a committee of fifteen be appointed, to be selected by the President, with special reference to their competency, whose business it shall be to revise the present pharmacopœia, and make a new one, to be presented at the next meeting of the Association, and if approved, then to be presented to the American Medical Association, subject to their approval, and open to any changes which they may think proper to suggest—the sole object of the pharmaceutical committee being to do the work as they (the physicians) want it done. It is understood that Dr. Squibb declined to let his name be placed on the committee. An able committee, however, was ap-

pointed, and one that will work with energy and enthusiasm, dividing themselves into sub-committees, and appropriating the respective branches, such as materia medica, botany, chemistry and pharmacy, to those most familiar with the respective subjects.

When the subject of the next place of meeting came up, Mr. Ingalls, of Macon, Ga., rose and extended an invitation to the Association to meet in Atlanta, Ga. This proposition was immediately seconded by all the Southern members present, who promised their Northern brethren a cordial and hospitable reception. The committee appointed to recommend the next place of meeting reported unanimously in favor of Atlanta, Ga., and when the Association adjourns it will do so to meet in Atlanta, Ga., on the 1st Tuesday in September, 1878.

The Canadians are entertaining their foreign visitors in a very cordial spirit of genuine hospitality, and have on several occasions provided long processions of fine carriages, in which they took the members of the Association, and the ladies accompanying them, through the most beautiful and attractive portions of the city, occasionally stopping to vacate the carriages, and guide their guests through some of the handsome public parks and buildings which adorn the upper part of the city.

But I fear that unless I cease firing, so to speak, I will contradict the proposition which heads this letter, viz.: to write a *short letter*. B.

Toronto, Canada, Sept. 6, 1877.

Original Translations.

From the French and German. By Wm. C. Dabney, M. D., Charlottesville, Va.

Treatment of Neuralgia by Salicylic Acid and Salicylate of Soda.—Some time since a case of very obstinate neuralgia was reported, in which excellent results were obtained from the use of salicylic acid. In *Le Progrés Médical* for July 21st, six cases are reported in which this treatment was resorted to with surprisingly good results. The cases are reported by MM. Descroilles and Ozenne. The first patient was 81 years of age, and was suffering with intense sciatica. There was no cardiac affection; no symptoms of gout, and, indeed, he had never suffered

from any serious disease. He had had an attack of sciatica every year for twenty years, each attack lasting two or three months. Blisters, baths and soothing liniments had been used externally, and opiates, quinine and other internal remedies had been employed with but little benefit. On the 7th of April, when he was suffering with a very violent attack, about forty-five grains of salicylic acid was administered in two doses. This amount was gradually increased till, on the 12th, about ninety grains was given in two doses. At this time there was deafness, confusion of ideas, delirium, and all the other evidences that the patient was fully under the influence of salicylic acid. The treatment was then suspended, the pain having been partially relieved. On the 16th, the acid was again administered, and was finally suspended on the 19th, the pain having entirely disappeared.

The second case was one of mild sciatica, which had lasted, however, for eighteen days. About thirty grains of salicylic acid were given on each of the first two days of treatment, and about forty-five grains on the third and fourth days. Entire relief having been obtained, the medicine was then suspended.

The third patient suffered from violent cephalalgia. Two months prior to the time the cephalalgia commenced, she had suffered from subacute articular rheumatism, affecting many of the joints. Five days of treatment with salicylate of soda produced complete relief.

The other three cases—one of neuralgia of the jaw, one of facial neuralgia, and the other a generalised neuralgia—were all quite promptly relieved by salicylate of soda, no case requiring more than sixty grains a day.

The writers remark very justly that the salicylate of soda is very far preferable to the salicylic acid—the latter being very insoluble, and irritating to the stomach and bowels. It should be remembered, furthermore, that cases of poisoning from salicylic acid in large doses have occurred, and a case of poisoning by salicylate of soda has very recently been reported by Weckerling. The dose in this case was about two hundred and twenty-five grains. The alarming symptoms lasted three days, but the case terminated in recovery.

The Salicylate of Soda in Rheumatism.—So much has recently appeared in the journals on this subject that it would seem almost unnecessary to say more about it; but the following conclusions of Jaccoud as to the value of this mode of treatment will prove interesting. M. Jaccoud's report of twenty-one cases was made to the Academie de Médicine on the 25th of July last. He says:

(1). In acute articular rheumatism, without complications, the salicylate of soda, in the dose of ʒij to ʒiij in the twenty-four hours, is the best therapeutic agent which we now possess. It cures more rapidly than anything else.

(2). Although the treatment will sometimes cure in from two to four days, it is not possible to assign to it a uniform duration of *three* days.* Those who expect such a result *always*, will certainly be disappointed, and a remedy which merits our entire confidence will thus be brought into disrepute.

(3). The salicylate of soda does not prevent the cardiac, pulmonary or central complication of acute rheumatism.

(4). Where these complications exist, the medicine in question has no effect upon them.

(5). In spite of its antipyretic properties, the salicylate of soda does not prevent the rise of temperature which accompanies the development of visceral complications.

(6). In acute rheumatism, with slight complications, the salicylate may be employed for its antipyretic and analgesic effects; but it is much better to add to this treatment the usual revulsives, and even stimulants.

(7). In acute rheumatism attended by serious complications, no confidence should be put in salicylate of soda, but recourse should be had to other remedies.

M. J. has also employed this salt in two cases of chronic rheumatism in which several joints were affected, but in neither case was any benefit obtained—his observations on this point not being in accord with those of M. Sée.

Effects Produced by Irritation of the Nerves of the Dura Mater.—M. Durét communicated to the Société de Biologie, at its meeting on August 4th, the results of his own researches, and those of M. Bochefontaine, on this subject. His conclusions, which will be seen to have an important practical bearing with respect to diagnosis and treatment, are as follows:

1. Irritation of the nerves of the dura mater produce, by reflex action, convulsive movements on the corresponding side of the body, and also *sometimes* on the opposite side in the face, trunk and limbs.

2. Irritation of these nerves may cause, by reflex action, dilatation of the pupils—especially the one on the corresponding side.

3. Their sudden excitation may cause a true "respiratory

*M. Sée has recently stated that acute articular rheumatism can *always* be cured by salicylate of soda in three days, and it is to this that Jaccoud alludes.—W. C. D.

syncope" and death from spasmodic contraction of the diaphragm.

4. They act also, by reflex action, on the vaso-motor nerves of the eye and of the brain on the same side, and this action is rapid and powerful.

5. In the same manner, they may increase the tension of the cephalo-rachidian fluid and that of the general circulation.

6. It is probable, also, that they act on the secretions, for in experiments on animals it is not unusual to see salivation and the involuntary discharge of the urine and fæces produced.

M. Durét thinks it will be possible for a skillful surgeon to determine whether a splinter of bone is in the dura mater or in the central substance. If in the former, the convulsions or contractions will *usually* be on the same side as the lesion; if in the latter, on the opposite side. He states that Dr. Blain has already practised trepanning in a case diagnosed in this manner.

The Absorption of Medicines by the Vaginal Mucous Membrane.—Dr. E. W. Hamburger (*Prager Vierteljahrsschrift f. prakt. Heilkunde*, 130) has recently made a number of investigations to determine the absorptive power of the mucous membrane of the vagina. The investigations were made on women from twenty to thirty years of age, and were conducted in the following manner: A tampon impregnated with a solution of some medicine was introduced into the vagina through a Fergusson's speculum, and then a dry tampon was placed behind it so as to prevent the solution from escaping at the vulva. These tampons were left in place for twenty-four hours, and then removed. The urine was then drawn by a catheter and tested for the substance which had been introduced into the vagina.

Iodide of potassium was found in the urine two hours after the insertion of the tampon, and could still be found twenty-four hours after the tampon had been removed. Ferro-cyanide of potassium could be detected after three hours, and was apparent twenty-four hours after the tampon was removed. Salicylic acid could easily be detected in the urine by chloride of iron three hours after the insertion of the tampon. Bromide of potassium, in 6 per cent. solution, could be detected in the same length of time. Chloride of lithium, in 11 per cent. solution, could be detected after two hours.

Hamburger calls attention to the practical bearings of these investigations. The administration of remedies by the vagina, he states, might be resorted to where from any cause the other avenues of administration were closed. It would be of especial service in gynæcological practice.

[I have used vaginal suppositories of ergot and belladonna

with most excellent results in chronic cervical metritis, and also in metritis of the body; and there can be no doubt but that this mode of treatment is destined to be much more used in future.—TRANSLATOR.]

Gelseminum Sempervirens.—Prof. Högyes writes as follows with respect to the therapeutical action of this drug (*Allg. Wiener Med. Zeitung*, Aug. 7th, 1877): Of German physicians, Jurasz and Berger have used gelseminum most frequently. The former used it in cases of neuralgia in various localities—supra- and intra-orbital and tracheal neuralgia and sciatica. He gave it in doses of from five to twenty drops three times a day, using Merck's tincture. The results were brilliant. Berger, in Breslau, used Gehe's tincture and the extract of the root in forty cases of neuralgia. He administered it sometimes hypodermically and sometimes applied it externally, but did not obtain the same favorable results that Jurasz had done, although he used larger doses than the latter. Berger says, with reference to the effects of gelseminum, that the only thing about it which is certain is that, in large doses, it produces symptoms of poisoning. Högyes calls attention to the favorable results obtained in neuralgia by American and English physicians from the use of this medicine, and very properly states that they will at least offset the negative results of Berger. He considers the question as yet unsettled, however, and states that its value can only be determined by further experience. He recommends the tincture to be used locally, without dilution, for toothache in cases where there are no inflammatory symptoms. It is the principal ingredient in the "anti-neuralgia mixture" of Hill.

The Therapeutic Action of Nitrite of Amyl.—Dr. J. Maximowitsch (*St. Petersb. Med. Wochenschrift*, No. 12, 1877) has used nitrite of amyl for its therapeutic effects in the following affections, and with the results mentioned below:

(1). Of sixteen cases of migraine in which it was employed, twelve were completely relieved. Even after the first inspiration the patients felt decidedly better. In one case, in a weak and nervous woman, the inhalations had to be practised eight times in an hour. In another case its use caused such "distress" that it had to be abandoned. In the remaining cases (two in number) it produced no effect whatever.

(2). In two cases of facial neuralgia having no apparent connection with malaria, rapid improvement followed the administration of amyl.

(3). In a case of giddiness due to anæmia of the vessels of the brain, which was itself due to a general deficiency of blood, complete relief followed inhalations of amyl nitrite, accompanied

by the use of iron internally. In another case, in which the vertigo was due to dyspepsia, relief was obtained after two inhalations. In a third case of vertigo, however, which was also due to dyspepsia, no effect was produced.

(4). In hysteria and hystero-epilepsy, even when there is not a complete cure, very great improvement may be obtained. In a very severe case of hystero-epilepsy, in which the paroxysms were almost an hour long, and which had proved rebellious to ice compresses to the head, inhalations of chloroform, &c., the inhalations of five drops of nitrite of amyl gave complete relief. A second attack was cut short in the same manner, and the patient was cured by this, together with the simultaneous use of other nervines.

(5). For fainting spells he considers the amyl far superior to anything else.

(6). In a case of epilepsy, its use will cut short an attack, or prevent it when there is a premonitory aura; and in connection with bromide of potassium and atropia, the convulsions have been prevented for four months.

(7). In headache from defective innervation of the vessels, whether due to disturbance about the stomach or to cold, its use will give good results.

(8). In five cases of poisoning by carbonic oxide great benefit was obtained from the inhalation of amyl, the patients being restored to consciousness thereby.

Dr. M. is led to the following conclusions, as a result of his experience in fifty crses:

(1). Inhalations of from five to twenty drops of nitrite of amyl, dropped on wadding, is attended by no danger whatever; and,

(2). Its use is indicated in all diseases which are attended by or due to defective innervation of the vessels. In all such cases it is very beneficial.

[It has been conclusively proven that nitrite of amyl dilates the smaller blood vessels, and hence, in cases of congestion about the nerve centres it would seem to be contra-indicated. The first experiments of the Translator induced him to think that this drug increased the power of the heart; but on further investigation this proved to be a mistake. The blood pressure is considerably lowered in dogs by the use of amyl. The way in which it increases the amount of blood in parts supplied by small vessels is by diminishing the arterial tension and causing a dilatation of the arterioles.—W. C. D.]

Indications for Thoracentesis.—M. Potain read a paper on this subject before the "Association Française pour l'Avancement des Sciences," on the 25th of August last, of which the

following are the conclusions, as published in *Le Progrés Médical* for September 1st:

(1). Of the different indications for thoracentesis, the abundance of the liquid is one of the chief.

(2). One of the chief difficulties in the way of determining the amount of liquid is the concomitant pulmonary hyperæmia.

(3). The hyperæmia is an accompaniment of nearly all cases of pleurisy, but in very different degrees.

(4). The signs which are of most service for indicating its existence and extent are the loud souffle, the persistence of thoracic vibrations, the displacement of the heart, which is generally proportionate to the other signs.

(5). The pulmonary hyperæmia may be a contra-indication to thoracentesis in two ways—(*a*) by showing that the amount of effusion is less than would at first sight appear (since the hyperæmia would account for much of the dullness, &c.); and (*b*) because the hyperæmia itself might be increased by the evacuation of the fluid.

(6). A manometer indicating the amount of pressure in the pleura would perhaps be useful.

Syphilitic Lesions of Arteries.—On the 27th of August last, M. Lancereaux read a paper on this subject before the "Association Française, &c.," which is highly interesting. He states that arterial lesions due to syphilis are much more common than is generally supposed, and are generally found in the vessels supplying the brain. The vertebrals, the basilar trunk, and the Sylvian arteries are those especially liable to be affected. The special anatomical feature of these syphilitic alterations is that they are very circumscribed. The little patches of syphilitic arteries rarely measure more than one or two centimetres in length, and, indeed, are not often as large as this. The disease is situated in the internal tunic of the arteries, in the non-vascular tissue. It causes a slight elevation—a sort of pustule, somewhat resembling a patch of atheroma. When these little patches open into the lining of the vessel, there remain some little cavities with very small openings like small aneurisms. In some cases these aneurisms develop to a certain extent only; in other cases they lead to the complete obliteration of the artery. In answer to the question how to distinguish these lesions from atheroma, which they resemble so much, M. Lancereaux states that—(1) they occur in syphilitic subjects; (2) atheroma develops chiefly in the large arteries—aorta, splenic, mesenteric and renal—while in syphilitic arteritis the alterations affect chiefly the arteries of the encephalon; (3) in syphilitic arteritis the patient is often young, while atheroma almost always occurs in old

persons; (4) finally, there is a certain symmetry in syphilitic arteries.

Arteritis due to syphilis may generally be distinguished clinically from atheroma and embolism. In embolism the symptoms come on suddenly, while in syphilitic arteritis they are developed gradually, and there are certain prodromic symptoms, such as headache, insomnia, &c. It is true that these prodromic symptoms also occur in atheroma; but in this the patient is generally old, while syphilitic arteritis, as previously stated, is a disease of the [comparatively] young. When the disease is atheroma, other arteries are usually affected besides the cerebral vessels.

The prognosis in this affection is grave, and in order to obtain satisfactory results the treatment must be prompt and vigorous.

Iodide of potassium in large doses, and the free application of mercury by friction, are to be recommended. Pills of proto-iodide of mercury are not advisable, as they are not readily absorbed.

Book Notices, &c.

Transactions of the Medical Society of North Carolina. 1877. Pp. 88. Dr. L. R. PAYNE, Lexington, President; Dr. L. JULIAN PICOT, Murfreesboro, Secretary.

As we gave in our June number a synopsis of the proceedings of this session, it will not be necessary further to refer to this part of the Transactions.

In casting our eye over the pages of the present volume, we regret to find that several papers are omitted; but this omission, we suppose, arises solely from the embarrassed condition of the Treasury. Among such omitted papers that were well worthy of publication were some by Dr. M. J. De Rossett, of Wilmington; a most valuable one by Dr. Joseph Graham, of Charlotte, on Lacerations of the Cervix Uteri; another by Dr. Thos. F. Wood, of Wilmington, on Vaccino-Syphilitic Inoculation; even the very excellent Annual Oration by Dr. J. F. Shaffner, of Salem, on the History of Medicine and Surgery, does not appear. Many valuable verbal reports and discussions are also not noted. We are glad, however, to announce that the important paper by Dr. H. T. Bahnson, of Salem, on Puerperal Convulsions, based chiefly on original observations, appears in this number of the *Medical Monthly*.

The first paper published is *Notes on Epilepsy*, by Dr. Eugene Grissom, of Raleigh, who, by his untiring energy and diligent research and magnificent papers, has established a national reputation as an alienist. He avails himself of his abundant opportunities, as Superintendent of the Insane Asylum of North Carolina, to perfect himself in his specialty. His paper covers 32 closely-printed pages—dealing especially with *larvated* epilepsy. We shall content ourselves by simply recording, without comment, the conclusions arrived at by Dr. Grissom: (1) Marriage between epileptics should be discouraged. (2) When epilepsy appears, every effort should be made to abort the paroxysms, commencing at the earliest age. (3) Perseverance in treating the disease should be the rule, and not the exception. (4) The microscopy of epileptic pathology should be carefully studied as offering the best hope of ultimately reaching an accurate conception of the disease. (5) The profession should educate the public mind in relation to the proper medico-legal status of the epileptic, and especially of the sufferer from larval epilepsy. Dr. Grissom very properly favors lenient judgment of epileptic criminals in courts of justice when crime has been committed under the influence of an attack.

Dr. W. W. Lane, of Wilmington, reports two cases—one of amputation of the leg just below the knee, followed by antiseptic dressing, with union by the first intention; the other, a case of exstrophy of the bladder in a girl two years old, which may be attributable to the fact that during the early stage of the mother's pregnancy, while using a hoe in her garden, she accidentally cut a frog open, and its bowels were turned out. An operation is postponed until the child becomes a few years older.

Dr. A. G. Carr, of Durham, reports a successful tracheotomy performed on a child 14½ months old for the extraction of a grain of corn from the larynx. Successful result, and recovery from the operation within a month.

The retiring President, Dr. George A. Foote, of Warrenton, "aiming at utility rather than novelty," selected Hypodermic Medication as the subject of his Valedictory Address. In speaking of the anæsthetic effect of morphine and atropia hypodermically, he relates a case seen in consultation with Dr. T. P. Jerman, of Ridgeway. Before excising a fibrous tumor near the insertion of the deltoid, weighing about a pound, from a colored woman, aged about 50, a half grain of morphia sulphate and a thirty-sixth grain of atropia sulphate in solution were injected into the fibrous growth. After a few moments, the tumor was extirpated without the slightest pain, the patient saying at the close of the operation, that had she not seen the cutting, she would not have

known what was going on. In the only other opportunity for repeating the experiment, the result was equally satisfactory. In neither case did sleep occur for several hours. The fact here stated is an important announcement, and should be further tested. Dr. F. also notes the case of a medical friend who is positive he was saved from death by hydrophobia (after the constitutional effects had developed to an alarming degree) by taking thirty drops of strong liquior ammoniæ every hour for several days in succession.

Fat and Blood, and How to Make Them. By S. Weir Mitchell, M. D. Philadelphia: J. B. Lippincott & Co. 1877. (For sale by West, Johnston & Co., Richmond.)

We have never taken up the writings of this distinguished author without learning something of practical value. The duodecimo of 101 pages now before us notes a real advance. Herein Dr. M. amplifies his lecture on "Rest in the Treatment of Nervous Diseases," published some months ago in Dr. Seguin's series of *American Clinical Lectures*. He acknwledges profit from the kindly criticism of this lecture by the able editor of the Chicago *Journal of Nervous and Mental Diseases*, which has led to improvements in the statement of the causes of some of the evils of rest. He has made some modifications in the plan of treatment then advocated, suggested by enlarged experience in this particular direction, and he adds some clinical records confirmatory of his previous reports on the subject.

In this volume, however, he confines his observations chiefly to the treatment of that class of nervous, thin and anæmic women, most of whom had been treated in turn for gastric, spinal or uterine trouble, but without benefit. The patient, most often between 20 and 30 years of age, complains of nervous exhaustion. She eats little, or, if she eats, does not profit by it. She grows pale and thin—the exceptions being the troublesome fat-anæmic class. Exercise quickens the pulse curiously, but everything wearies her—to sew, to write, to read, to walk—and, by and by, the sofa or the bed is her only comfort. She describes herself as aching and sore, as sleeping ill, and as needing constant stimulants and endless tonics. Sometimes diarrhœa or nausea follows exertion. Although in the presence of some dominant motive, she can do a good deal, yet the ensuing exhaustion will be proportionately marked. Uterine troubles soon appear, which are treated in vain if the general means to build up health fail. They acquire tender spines and furnish the most lamentable examples of all the strange phenomena of hysteria. In a smaller

number of cases there are no hysterical tendencies. The patient is merely hopelessly below the standard of health, subject to a host of aches and pains, without notable organic disease. The same general train of symptoms sometimes occur in men.

The treatment adopted by Dr. M. for this class of patients consists in (1) seclusion, or separation from over-anxious parents and friends; (2) absolute rest in bed from six weeks to two months—the patient for ten days or two weeks not being permitted even to sit up, or to sew, or to read. Very gradually indeed is she allowed to make any advance in exercise—even at the end of two months, being allowed to sit up only a few moments at a time. (3) *Massage* is one of the means necessary to deprive rest of its evils; but for the details of application of this measure, we must refer the reader to page 52 *et seq.* of the volume. In general, if, under massage of the legs of a highly hysterical woman, the limbs get cold, and if this continues to be complained of, it is no very good omen of the ultimate success of treatment. In very excitable people, massage sometimes arrests menstruation. (4) *Electricity* is the other means to deprive rest of its evils. The induction current, with interruptions as slow as one in two to five seconds, is preferred, as it gives painless exercise.

Chapter VII is devoted to Dietetics and Therapeutics. This is so full of details that it would be impossible to make a just notice of it in the short space allowed us. Very striking however, are the remarks concerning the benefit of treating the fat anæmic by skimmed milk. The use of milk often forms an essential part of Dr. M's early treatment of the thin anæmic.

The Ear: Its Anatomy, Physiology and Diseases. By CHAS. H. BURNETT, A. M., M. D., Aural Surgeon to the Presbyterian Hospital, Surgeon in charge of the Infirmary for Diseases of the Ear, Philadelphia, etc. With 87 Illustrations. Philadelphia: Henry C. Lea, 1877. 8 vo. Pp. 615. (For sale by West, Johnston & Co., Richmond.)

This text-book is prepared by an author of great distinction in his specialty, both as a practitioner and a teacher. His right to this distinction is manifest from an examination of the work he now presents the profession.

The work is divided into two parts. Part I (about 150 pages) is devoted to Anatomy and Physiology. Many of the physiological matters especially have been the subjects of the author's personal investigation and announcement, and his anatomical descriptions have been based upon his actual verification. Seldom do we find authors now-a-days who are not content to base their

statements simply upon the authority of some predecessor. Thus error, once announced as fact, is often long continued.

Our limits do not allow a detailed examination of Part II, which treats of Ear Diseases and their Treatment. Section I gives an excellent description of the best means of making an examination of patients. After this, come sections on organic defects, diseases, injuries, &c., of the auricle, the external auditory canal, the membrana tympani, the middle ear, and of the internal ear. Finally, Section VII treats of deaf mutes and partially deaf children.

Without being able to enter into any detail, we are constrained to give this book a cordial recommendation.

An Index of Diseases and their Treatment. By THOMAS HAWKES TANNER, M. D., F. L. S. Second Edition. Revised by W. H. BROADBENT, M. D., F. R. C. P., etc. Philadelphia: Lindsay & Blakiston, 1877.

This *Index* is familiar to most practitioners, and is useful in its way. It is a hand-book of 432 octavo pages—250 pages being taken up with an index of diseases, a synoptical statement of treatment, etc. The remainder of the book is given up to an Appendix of Formulæ. Such a book as this is always serviceable to the busy practitioner, as a ready reference book. It is neither intended by the author, nor should it be allowed by the owner, to take the place of more systematic treatises. Its purpose is rather to indicate to the physician what he should read in reference to special cases. The tabular synopsis of diseases, &c., in the first part of the work materially aids the doctor to find what he looks for. Thus under the general heading of Brain Diseases, we find the names of such diseases as are located or have their origin in the brain, with reference to the pages on which each individual disease is described.

Analyses, Selections, &c.

The Importance of Cincho-Quinine as a Remedy.—The Supervising General of the Marine Hospital Service has issued a circular letter to the medical officers of that branch of the Treasury in which he calls their attention to the extraordinary increase in the market price of sulphate of quinia, and at the same time alludes to the success attending the employment of the other alkaloids of the bark.

In the year 1866 the Madras Government appointed a Medi-

cal Commission to test the respective efficacy in the treatment of fevers, of quinine, quinidine, cinchonine, and cinchonidine, and the remedial value of these four alkaloids as deduced from their experiments is shown by the following statement:

Quinidine,	ratio of	failure	per 1000	cases..... 6
Cinchonidine,	"	"	"	10
Quinine,	"	"	"	 7
Cinchonine,	"	"	"	23

Cincho-quinine contains all these alkaloids, and the combination has proved more efficacious than any one alone; and the price of this article being less than one half the present price of sulphate of quinine, the physicians of this country are substituting it for the sulphate; and the medical officers of the Government service should give this subject due consideration in preparing their requisitions for medical supplies.—*Washington, D. C., Daily Nation*, August 8, 1877.

A Case of Successful Ligation of the Left Primitive Carotid Artery is reported by Dr. B. M. Smith, of Athens, Ga. (*Trans. Med. Assn. Georgia*, 1877). The patient, aged 18 years, July 22, 1869, received an incised wound, extending from the top and in front of the left ear to a point on the neck below the angle of the lower jaw, severing the external carotid artery and injuring the parotid gland. No means used would control the hæmorrhage satisfactorily, and on the eleventh night an aneurismal sac ruptured. Unavoidable circumstances delayed an operation for two or three days more. Necessity then compelled the tying of the left primitive carotid artery about an inch above the left clavicle. The collapse following the ligation was profound, and lasted some eight or ten hours, after which he rapidly recovered. The ligature came away on the eleventh day. A partial paralysis of the left face ensued, with palpable diminution of vision, followed by total loss of sight in the left eye. Probably the nerves governing the eye muscles were severed, thus disturbing the axis of vision, and in the effort to accommodate the diseased eye to the focal points of the sound eye, vision was lost. The left eye shows a want of lustre. By closing the right eye, the patient can see from the left eye, but the consentaneous image grows dimmer and dimmer until it is entirely lost. Dr. Smith attributes success to the excessive and profound degree of collapse following the tying of the primitive carotid—the powers not having force enough to disturb the clot in forming.

Infantile Therapeutics.—Prof. John A. Larrabee, M. D., of the Hospital College of Medicine, Louisville, Ky., read a good

paper on this subject before the Kentucky State Medical Society, from which we make the following extracts:

Nourishment of Infants.—During the early months and years of childhood, attention to diet forms the principal part of practice in infantile diseases. The only proper food is that with which nature provides the mother, and where there exists no satisfactory reason to withhold it, that alone should be given. There are, it is true, certain conditions of both the mother and the milk which cause us to seek for some other nourishment for the child, but they are very few; were we to try as hard to correct them as we do to find suitable artificial nourishment, such instances would be greatly decreased. Even the infant suffering from inherited syphilis may often be safely nursed by its mother, as I have frequently demonstrated in practice.

In order that cow's milk shall be a proper substitute for mother's milk, it is necessary to add to its sweetness and lessen the amount of casein. For this purpose, cane sugar will not do. Lactine or sugar of milk should be used, and the condensed milk is at once the most convenient and acceptable substitute. To obviate the second difficulty, it is necessary to make use of something which will separate the casein, and act mechanically to prevent the formation of cheesy masses, so often seen in the ejections and dejections of bottle-fed infants. For this purpose, I have used with great satisfaction the "granum" prepared from gluten of wheat.

Water.—As a therapeutic agent, water of different temperatures plays a large part in infantile treatment. The cold bath for reduction of temperature, with few exceptions, proves injurious rather than beneficial. The shock it produces, unless designed to arouse the nerve centres in asphyxia and similar conditions, or in coma, and the liability to produce internal congestion, are certainly worthy of consideration. For a short time the temperature is lessened, but it speedily returns, if not to exceed the former standard. As a means of keeping the head cool in diseases of the brain, and lessening the cerebral symptoms of ordinary fevers, no means is so effectual as the rubber coil, by which the heated water is constantly replaced by the cold, and all wetting of the pillow or person of the patient is avoided. The cap or coil is placed under the occiput and allowed to cover a portion of the head.

Medicated baths are not sufficiently employed. In rachitis, scrofula, and other debilitating cachexiæ, astringent baths ought to be daily employed. Artificial sea-water may be easily prepared. A few grains of the bichloride of mercury added to the warm bath, with inunction of a small quantity of mercurial oint-

ment, is at once the most pleasant and effectual mode of curing infantile syphilis. The cerebral symptoms in the bronchitis and pneumonia of children are often relieved by warm and stimulating pediluvia given during the acute stage of the disease.

The *Mercurials* occupy, as is now generally conceded, a most prominent place in diseases of children.

Malt.—The benefit which for a long time has been accorded to malt liquors can be attained without alcoholic fermentation. The "Improved Extract of Malt," manufactured by the Trommer Malt Company, has proven that the real tonic properties depend upon its not undergoing fermentation. I have given these preparations to over three hundred patients during the past year, and I have yet to see a single case in which benefit has not accrued. It may be said that the medicines contained in some of the preparations should have the credit, but I have been careful to use such preparation in cases where the medicinal agents therein contained have before been given with little or no advantage.

In tuberculosis and scrofulosis, malt improves nutrition and arrests the progress of the disease, acting in this way similarly to cod-liver oil, save that its effects are more decided and it agrees better with the stomach.

In the continued cough of pertussis, where, after the acute stage has subsided, the patient has prolonged spells of coughing, plain malt exercises a most marked effect. Children not infrequently continue to cough like whooping-cough for a year or more after having had the disease. In all such cases the cough is kept up by the bronchial glands enlarged in the acute stage. Malt extract is well adapted to this stage of convalescence.

In convalescence from the ordinary fevers, and especially remittent, ferrated or plain malt, with citrate of iron and quinine, is *par excellence* the treatment.

I am quite confident that by carrying starch through its changes to a rapid end in combustion, malt is well calculated to accomplish good in the rheumatic diathesis of children. In six cases it was of decided benefit in securing an immunity from the hitherto frequent attacks of rheumatism, one of which had suffered eight attacks in five years, and had cardiac lesion.

Bitter Tonics.—Quinine has gradually supplanted the simple vegetable bitters. The fact that alkaloid principles do not contain all the valuable properties of the substances from which they are derived, and are less likely to agree with the stomach, is sufficient reason that we should not discard such substances in diseases of children.

Infusion of columbo is very valuable in chronic vomiting as

well as in convalescence from cholera infantum and diarrhœa. It affords the best vehicle for the soluble citrate of iron, and, modified to suit the condition, such a combination is most valuable.

Among the vegetable *Astringents*, crane's-bill and logwood are most reliable, and I believe best adapted to infantile practice. When astringents are used as diuretics, as in dropsy after scarlatina, it is better to use the proximate principle (tannic acid) in large doses.

Emetics.—The indication for this class in childhood is greater than in adult practice. In capillary bronchitis and pertussis, the dangers which are avoided and the quiet sleep which follows vomiting are of great advantage. In all cases were emesis is designed to act otherwise than simply to expel the contents of the stomach, the wine of ipecac is the best preparation. As an irritant emetic, when the nerve centres are obtunded by narcosis or disease, sulphate of zinc is certainly the most reliable. It is to be hoped that tartar emetic is not used in child practice.

Quinine.—It is necessary frequently to administer quinine to the mother during her pregnancy for the preservation of the fœtus. I have lately observed several cases of pigmentation in infants who have died in a few weeks after birth, the mothers having suffered greatly with malaria while *enciente*. Dr. Wright, in a report upon this "rare disease of infants," does not find the same connection as to cause and effect. The history of all of them may be expressed in one. In a period varying from four days to two weeks after birth, the child begins to assume a peculiar color. At the time when the normal ecchymotic color-change is completed in healthy infants these begin to fade. The child refuses the breast, and the mouth is seen to be filled with aphthous looking sores. The urine, which is scant and frequently suppressed, stains the napkins brown and finally black. The sclerotic is not icteroid. Masses resembling coffee grounds are found escaping from the urethra, which is often entirely blocked by them. The ureters, bladder and pelvis of the kidney contain them. They resemble blood at first, and have an unctuous feel. The microscope fails, however, to show that it is blood; and though when the specimen was in its moist condition I had little hesitancy in pronouncing it such, several microscopists who examined it were unable to denominate it. The examination made by Prof. Hough of specimens in Dr. Wright's cases showed melanosis, or a substance so nearly resembling pigment that Prof. H. denominated it melanoidine. Prof. Marvin is of the same opinion.

The sulphate of quinia is a powerful irritant when applied to inflamed or denuded structures. It is therefore not infrequently

rejected at once by the stomach, and a tolerance is not established by persistent repetition of the dose. The same applies in even greater force to the sulphates of the congeneric alkaloids of bark. Cinchona seldom fails to produce vomiting. The muriate is the most acceptable to the stomach as well as to the rectum. The introduction of quinia by inunction in young children, after the morning bath, has proven entirely successful in my hands.

Various means to render quinia tasteless have been devised, the best of which is probably the aromatic elixir of liquorice. Tannin renders quinine quite tasteless and almost useless. The tincture of quinia and the orange wine of the British Pharmacopœia are more elegant preparations.

The question to decide before administering quinia for the reduction of temperature in non-malarial cases is, whether the advantage gained is sufficient to compensate for the cerebral disturbance and congestion produced. In enteric typhus, quinia does more harm than good.

Cardiac Stimulants.—At the very head of this class stands digitalis. In organic disease of the heart (no longer considered a rare disease of childhood), the prognosis as to compensatory relief under its use is certainly more favorable than in the same lesions in adult life. In mitral regurgitancy the bruit is increased by digitalis, but the cough and asthmatic dyspnœa are relieved. The infusion of digitalis often affords great relief in various forms of dropsical effusions; yet, it is, properly speaking, no more a diuretic than tannic acid, which, as we know, also increases the flow of urine in certain instances. A failure or paucity of the urine occurring while digitalis is being administered should be regarded as a sign of danger. I have only once noticed the blueness of the sclerotica described by some writers as a toxical symptom. I have not found it necessary to give large doses in cardiac diseases of children, but it has been necessary to continue it for a long time. I gave it in one case for a year with but a few short intervals; in three others it was given consecutively for over six months, resulting in relief of every symptom except the bruit itself. I have at no time observed any of the cumulative action of the drug, and it very rarely disagreed with the stomach. Cinnamon water appears to be a good corrigent for the nausea which digitalis may produce.

Belladonna stimulates the heart indirectly by its paralytic effect upon the inhibitory nerve centers. Irregularity of the heart's action not unfrequently has its origin in the brain rather than in the heart. Severe and prolonged mental application may thus often disturb the rythmical contraction of this organ by a stimulation of the inhibitory centers. As a stimulant to

the capillary circulation, belladonna is exactly suited to a relaxed condition of the skin, as well as to the more complex diseases of the spinal cord. Children tolerate the drug beyond the age ratio followed for other medicines.

Cardiac Sedatives.—The indication for this class of medicines in the inflammatory and febrile conditions of childhood is more positive than in adult practice. Such conditions are often of a sthenic type, and most of the febrile conditions are of an irritative character; the heart's action is greatly accelerated, and its force is also increased at the expense of the muscular power. In these conditions the most valuable agent is aconite, and the most reliable preparation is the tincture of the root. Its action as a local sedative also, when applied to any part of the mucous tract, is a great advantage where the stomach is irritable and medicines cannot be retained. The smallness of the dose—one-fourth of a drop being sufficient for an infant—and its tastelessness when properly diluted, are points of great importance. Veratrum viride cannot, I think, be compared with it in value in childhood; although it is considered to be a safer agent, the nausea and purging induced render it unfit for many cases.

Spinal Sedatives—Conium.—As an agent affecting the circulation in the brain and spinal cord, and as a paralyzant of voluntary muscles by its effect upon the afferent spinal nerves, conium has not yet attained the high place in general practice which it deserves. Perhaps the two circumstances which have led to this are, first, that in diseases requiring the use of conium, as in spinal irritation, congestion, meningitis, etc., the medicine is seldom employed in sufficient dose; second, there is very little of the drug which is reliable. Conium should be administered as digitalis; *i. e.* for its effects alone, without reference to quantity. Dr. Harley has declared that conium is to the corpora striata, the smaller nerve centers, and the entire motor tract, "what opium is to the brain." Since I have been less careful in regard to the dose, I have had better results from the use of conium. Some years ago I made extensive use of extract of conium in cerebro-spinal meningitis, and with marked benefit. The only preparation which is at all reliable, is the fluid extract.

Salicylic Acid.—The effect of this acid in controlling acute rheumatism is truly wonderful. Much of its value no doubt depends upon the sedation exerted by it upon the circulation, as a consequence of which pain is lessened and temperature reduced. I have found the pain of migraine and other neuralgias yield very promptly to its use. As a local application to the nasal and pharyngeal mucous membrane in diphtheria and other diseases, it is unexcelled. Its caustic nature demands care in its

use, especially in young children, and the following formula makes an excellent and safe mode for its administration :

℞. Acidi salicylic.....ʒjss.
Ammoniæ citratis.....ʒss ad ʒj.
Syrupi cinnamoni.....ʒjss.
Aquæ cinnamoni.....ʒss.

M. Ft. solut. Teaspoonful every second hour for a child of five years suffering with rheumatism.

The putrescent character of the stools in children suffering with summer diarrheas is at once changed by salicylic acid, and a corresponding improvement in the condition of the little patient noticed. Its power over living germs renders it at once invaluable when contagion is feared. Prof. Abelin, of Stockholm, says that "in children, doses large enough to bring down temperature acted as a poison," and cites a case in which twelve grains caused death. In such doses it seemed to be a corrosive poison. In smaller quantities it lowers temperature without exerting any beneficial effect upon the course of the disease.

Jaborandi.—Most of the experiments have been performed with an infusion of the drug in substance, and in this way when given in five- or ten-grain doses it has uniformly produced its characteristic effect. Now that we have its active or alkaloid principle (pilocarpin), it is probable that we may eliminate some of the hitherto ascribed properties as being common to the piperacea. Its action is upon the glandular system. Therefore, as a therapeutic agent, it must be limited to the restoration of the function of the skin, salivary glands, and the mammæ, or to establish vicarious action by them.

Its use in acute febrile excitement or during the eruptive stages of the exanthemata is opposed to the principles of sound therapeutics, and I am not surprised that disappointment has attended its administration where the vitality of the skin is impaired, or where perspiration and transpiration are checked by reason of high temperature. By the use of stimulating diuretics, we do harm in certain diseases of the kidneys, no less than when we employ stimulating diaphoretics to restore the function of the skin which is already surpressed by over-stimulation. The indication is to lessen the force of the heart and bring down the temperature. If this be done by proper means, the perspiratory glands will resume their functions without the aid of jaborandi. The same applies to the salivary glands during the stage of eruptive excitement in scarlatina, and a failure of this drug under the conditions should not weigh against its usefulness.

Pilocarpin in one-twelfth of a grain, equals five and a half of the drug in effect. It is an oily substance like conia, but not

possessed of odor. It has little effect upon the heart and upon temperature, and the sense of debility after its use in health must be no argument against its use when the system is oppressed by dropsy (ascites or anasarca), for this same sense of weakness will be turned to strength by the use of this agent. By far the most numerous cases of dropsy in childhood are post-scarlatinal, and the testimony of those who have used jaborandi is in its favor. In certain dropsical effusions, it offers the best and most prompt relief. The propriety of its use in cardiac dropsy, except for temporary relief, may well be doubted. It is best in dropsy depending upon disease of kidney, as vicarious action is the only hope of even temporary relief. In cardiac dropsy, it must not be made to supplant digitalis.

Ergot produces vaso-motor spasm, and consequently increased arterial tension, through its action upon the nerve centers within the cranium. This fact, if it be conceded, gives to the drug a therapeutic importance, in treatment of diseases affecting the circulation, unequaled by any other medicine, unless it be determined that ustilago is more powerful. I have made extensive use of ergot based upon the above theory, and so far with the best results. The importance of ergot as a therapeutic agent in congestions of the brain and spinal cord in childhood, in catarrhal and mucous diseases, etc., renders it especially proper to include it in the medicines of childhood.

Chloral Hydrate.—It must not be forgotten that the symptoms relieved by chloral hydrate and potassium bromide are dependent upon hyperæmia of the nerve centers in the brain or cord, and that sudden exhaustion is attendant upon many diseases of infants; *e. g.* cholera, diarrhœa, etc., in which convulsions usually terminate life. Chloral and bromide would but increase the trouble, and stimulants alone are indicated. The apyretic action of chloral hydrate renders the mixture additionally valuable in high temperature when convulsions threaten.

The local use of chloral hydrate is scarcely less valuable. I now depend upon its prompt and pleasant action in diphtheria; to abort abcesses, and to prevent the formation of pus in sinuses, as a gargle in stomatitis and in scorbutic gums of childhood it is unexcelled, as well as in the angina of eruptive fevers. Chloral hydrate and bromide of potassium are contra-indicated in chorea. The rapid anæmia in these cases is of itself sufficient reason to predict what practice confirms. In hooping-cough a combination of the bromides, as in the formula of Dr. Brown-Sequard, will, if pushed, always give satisfaction. As a general thing in such cases the doses are far too smal,l and the interval too long.

The Respiratory Brace, introduced by Dr. George F. French, of Portland, Me. (*Boston Med. & Surg. Jour.*), as will be seen by the accompanying electrotype, is very simple in construction, and serviceable in practice. From each end of a cross-bar hangs a strong elastic webbing, looped as in the drawing, to rest the arms. The head is steadied by a broad band passing around the forehead. This band is held in place by guys stretching across to the upright elastic supports. The apparatus is suspended from the ceiling. It needs no further explanation as to its *modus operandi*. It is far preferable to pillows on the back of a chair, or other devices in common use for the unfortunate victim of orthopnœa. The thorax is slung, the head steadied, thus preventing muscular fatigue; the respiratory muscles have the best possible chance to act, while the patient is supported in an easy sitting position for sleep. The apparatus is also useful whenever it may be necessary to relieve the upper portion of the body from the weight of the shoulders and head.

Editorial.

The Engraving and Sketch of Dr. Hunter McGuire, which we present in this number, will be highly prized by the host of friends and admirers of this able surgeon. Not only does his great popularity with the profession in Virginia, North Carolinia, West Virginia and other States make it a pleasure to us thus to meet a wish of many of our readers, but his achievements in surgery and his contributions to medical literature entitle him to this distinction.

We have been fortunate in securing of the photographer what the friends of Dr. McGuire regard as a capital likeness, and the steel-plate engraving is no less satisfactory. But far more fortunate have we been in securing the services of Dr. Otis F. Manson for the preparation of the biographical sketch. The marks of an accomplished writer and a careful recorder are manifest in every line.

The engraving and biographical sketch of Dr. Lewis A. Sayre, of New York, and of Dr. Robert Battey, of Rome, Ga., have been engaged as already announced. We expect to publish the former in our January number, and the latter in April, 1878.

The Medical Society of Virginia.—The prospect is encouraging as to the success of the session to convene in Petersburg, October 23d. The local committee is active in making arrangements; applications for fellowship are coming in from all sections of the State; Fellows are informing the Secretary of their purpose to attend, and of their intentions to present papers. This is all as it should be; it looks like business, and a valuable result will follow such effort. Let every one contribute his mite. There is work for every one to do.

Fellows who may attend the session are indebted to the local committee and to the Executive Committee of the Society for having made the following arrangements with lines of travel in the State:

The Petersburg and Weldon railroad will charge full fare going to Petersburg, and will return free.

The Atlantic, Mississippi and Ohio railroad will charge full fare going, and half fare returning.

The Richmond and Petersburg railroad will charge full fare going, and will return free.

The Seaboard and Roanoke railroad will charge three cents per mile each way.

The Richmond, York River and Chesapeake railroad will charge full fare going, and will return free.

The James River Steamboat Company will charge full fare going, and will return free.

The James River (U. S. Mail Packet Line, Harman Brothers) Canal Company will charge full fare going, and return free.

In each case the Secretary's certificate of attendance will be required. It is hoped that like arrangements will be perfected with other lines of travel before the time of meeting.

The Superintendency of the Eastern [Va.] Lunatic Asylum is again most causelessly under some discussion. Fortunate it is for the State that the position is not in the gift of a local board of non-professional people. A better man, a more qualified physician, a superior executive officer cannot be found in Virginia than Dr. Harvey Black, the present encumbent. He is the choice of the profession of Virginia for the place. He was selected without solicitation on his part, urged by his friends everywhere to accept the place, and he has been maintained in

position by acclamation of the medical profession—the best judges in the matter—and by the friends of patients in the Asylum. Such an institution as the Eastern Lunatic Asylum may support a small town, but is not dependent on it. It is a *State* institution, intended alike for the benefit of Southwest and Eastern Virginia, and the most competent available man in the State should be selected as the Superintendent. The equal of Dr. Black is not available; hence no change in this particular should be thought of.

We write thus, not because there appears to be any difference of opinion in the profession regarding the matter of which we speak, but because intimations have gained currency that one or more of the non-professional Board of Visitors thinks that the superintendency of an insane asylum should not necessarily be given to a physician. Then, also, it is suggested that such positions should be among the bestowals of gubernatorial favors. We are glad to have the assurance that Gov. Kemper rises superior to this political view of medical appointments, very rightly maintaining that a board of medical men should direct the medical affairs of the State.

The Retreat for the Sick is the best place in the city for patients who come here to place themselves under medical treatment. Private rooms with nurse's attention, etc., are not so expensive as the costs at a hotel, and the conveniences for the sick are greater. See advertisement on 14th page after reading matter.

The Ethereal Extract of Ergot, prepared by Polk Miller & Co. of this city (advertised on 16th page after reading matter) is used by many practitioners of this section in preference to other preparations of the article. Great care is exercised by the firm in the selection of the best articles, and exactness in the manufacture of the Ethereal Extract.

The Opening of the Medical Colleges this season indicate prosperous sessions. The two institutions in this State especially—the Medical College of Virginia and the Medical Department of the University of Virginia—have encouraging prospects. We never feel the slightest hesitation in recommending either of these two Colleges, because the faculties are able, the lectures and examinations thorough, the standards for graduation high.

Dr. C. W. P. Brock, of Richmond, Va., has recently been appointed a Visitor to the Eastern Lunatic Asylum, at Williamsburg, to fill a vacancy caused by the resignation of a Visitor from Danville. The appointment is first rate. Gov. Kemper has the right view of such appointments—medical boards to superintend medical matters.

The Combined Call-Book and Tablet, and the Physician's Handy Ledger, of Dr. Ralph Walsh, are advertised in this No. The *Call-Book and Tablet* is the best visiting list we have ever seen. It has already become popular in this city, and we know of no physician here who has used it who is willing to exchange it for any other. We have not yet seen the *Ledger*, but from the description given of it, and from Dr. Walsh's knowledge of the practical wants of physicians in this line, and because of his success in furnishing so excellent a visiting list, we feel that this ledger may be confidently recommended. Dr. Chas. S. Brittan, 511 E. Clay street, has undertaken the agency for this city, and will cheerfully furnish, upon application, any information regarding these publications that may be necessary.

Messrs. Lindsay & Blakiston's Visiting List for 1878 is issued thus early in order to supply booksellers and druggists throughout the United States and Canada, from whom mainly the profession obtain it. A large number of copies are sent by mail upon receipt of price. This Visiting List is in the 27th year of publication. It was the *first* book of the kind published in this country, and for many years was the only one. It has now become a general favorite.

The Physician's Office Record and Ledger.—Mr. John A. Butler, Boston, Mass., whose advertisement has been continued in our columns for some time, has the best books of this class for office use that we have ever seen, and hence for our personal use have adopted them exclusively. This is saying a good deal, as we are being constantly "drummed" by some other manufacturers regarding their books, and therefore have frequent opportunities for making thorough examinations of such publications. Mr. Butler seems to strive to please his customers.

Medicinal Plasters of the best quality are manufactured by Messrs. Seabury & Johnson, advertised on the tenth page preceding reading matter. Utilizing rubber as a base for plasters originated with this house. The advantages are perfect pliability, adhesion without heat or moisture, preservative character of the combination, and increased action by porousing.

Messrs W. F. Evans & Co., of Chicago, Ill., begin an advertisement with us this month of watches, jewelry, &c., which will be found of interest to many of our readers. The firm and their goods are well recommended.

Packer's Pine Tar Soap is so useful and well endorsed that we wish to call special attention to the advertisement on the eighth page *preceding* reading matter.

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Original Communications.

ART. I.—*Puerperal Convulsions.* By R. L. PAYNE, M. D., President of the Medical Society of North Carolina, etc., Lexington, N. C.

CASE I.—Very early in the morning of April 19th, 1877, I was called upon to visit a young married lady, nineteen years of age, who was *enceinte* with her first child, and who expected to be confined in about two weeks. The trouble for which she sought my aid was an intense, throbbing, agonizing headache. This headache was confined to the frontal region, and more especially to a circumscribed spot above the right eye.

On the evening before, she had been as well as usual; had eaten a heavy supper, gone to bed early, and slept soundly until the middle of the night, when she was awakened by the severe pain in her head. Her tongue was very slightly covered with a yellowish-white coating, and her pulse was somewhat less frequent than natural, full and resisting. Her face and lower extremities were a little œdematous, her bowels constipated, and bladder irritable—requiring her to pass water frequently, yet the quantity of urine voided was small. There was about her face that dull, heavy expression, and ashy or leaden color so commonly seen in such cases.

I desired to bleed her freely at once, and did propose to her to let me do so; but she opposed it, and became so much alarmed and excited when I urged it that I suffered my judgment to be overruled by her fears, and contented myself by prescribing a warm foot-bath, cold applications to the head, a sinapism, followed by warm poultices over the region of the kidneys, an active hydragogue cathartic, and a diuretic mixture. I told her

husband that I feared convulsions in her case, and in consequence would not leave town until I heard from her again.

In about two hours I was summoned in great haste, and when I arrived, found the lady just emerging from the effects of a convulsion. As soon as she became a little more conscious, although she still opposed it, I had them to hold her arm, and I bled her to the extent of twenty ounces. I then prescribed twenty grains each of chloral hydrate and bromide of potassium every four hours, and continued the cold applications to the head, and the diuretic before ordered.

Soon after this, her bowels were several times freely moved by the cathartic, but the secretion of urine continued scanty, and was very highly albuminous. Sometime during the next day the dose of chloral hydrate was diminished.

She had no other convulsions at this time, and remained in a comparatively comfortable condition until the forenoon of the 26th, when she was taken in labor. Her labor was in all respects natural, and at 5 o'clock P. M., she gave birth to a vigorous female infant.

During the second stage of labor, I kept her partially under the influence of chloroform, because I constantly feared a return of convulsions, and immediately after the birth of the child I gave one eighth of a grain of the sulphate of morphia by the mouth.

The placenta came away readily; the womb contracted down firmly; the binder was applied; the child, which had been given to the nurse, had been washed and dressed, an hour's time had elapsed since the birth, and I was just upon the point of leaving the house, when the lady said to me, "Doctor, my head swims badly, and I am so blind," and immediately went into a most terrible convulsion.

She was properly cared for during the spasm, and when it had gone off, I gave her, by the mouth, one-half a grain of elaterium, injected one-eighth of a grain of the sulphate of morphia under the skin of the arm, applied cloths wrung out of ice-water to the head, and brought her gradually under the influence of chloroform again.

But in spite of this treatment the fits continued to recur at regular intervals. After she had had three or four convulsions, Dr. Hill, of this place, met me in consultation, and it was agreed to continue the treatment and push the chloroform a little further. We then gave it to the surgical extent—that is, until she was decidedly and profoundly under its influence; still the convulsions continued to recur as before, with unabated violence, whenever the use of the chloroform was for a short while suspended.

We now bled her again, taking about twelve ounces of blood from the arm, and ordered a stimulating enema of the spirits of turpentine. Neither the elaterium nor the enema produced much effect upon the bowels, and, in consequence, we gave her another dose of the elaterium.

All treatment appeared to be of no avail, the convulsions continuing to return regularly until nearly day of the morning of the 27th, after which time she had no other convulsion. From this time the chloroform was discontinued, and its use was frequently suspended before this; yet, after the fifth or sixth convulsion, she remained in a state of profound coma, never rallying at all between the attacks. The pupils of her eyes were very much contracted.

During the whole of the day and throughout the night of the 27th, she lay in a comatose condition, and died just before dawn of the morning of the 28th.

Case II.—April 8th, 1877, Judy K., a stout, thick-set negro girl, aged 17 years, aborted about 18 months previously, and was again pregnant, and advanced to the beginning of the 7th month. Convulsions came on in the night, and she had passed through several before it was possible for me to see her. When I arrived she was in one of the most horrible convulsions, and one of the longest in duration I ever witnessed.

After the convulsion had passed off, her pulse was a little excited in frequency, full and bounding, and the pupils of her eyes were contracted to their smallest capacity. An examination per vaginam revealed no evidences of beginning labor.

As soon as it was possible, I abstracted fully thirty-five ounces of blood from her arm in full stream, and administered one-fourth of a grain of morphia subcutaneously. As she could not swallow readily, I put four drops of croton oil upon a case-knife blade and wiped it off as far down upon the root of the tongue as possible, and ordered cold applications to the head.

Being compelled to visit other patients, I did not see her again for three hours, at the expiration of which time I found her sleeping sweetly. She had slept well, and had had no other convulsion since my first visit. The croton oil had not acted. When I awoke her, she answered confusedly, but she was sufficiently sensible to swallow pills containing three drops of croton oil. I now prescribed a solution of chloral hydrate and bromide of potassium, to be given every four hours.

Had the convulsions continued, I would have resorted to the induction of premature labor; but she had no unpleasant symptom from this time, except from the severe action of the croton oil, until the night of the 22d, when she was again seized with convulsions.

Being again sent for, a digital examination was made, and the mouth of the womb was found dilated to the size of a silver half-dollar, and the bag of waters beginning to protrude.

Just as I had ascertained these facts by the examination, another spasm came on. I bled her again about 20 ounces, put ¼th of a grain of morphia under her skin, and applied cold to her head. About 3 hours after this she was delivered of a still-born and decomposing fœtus. She had no other convulsion after the second venesection, and in three weeks after she was delivered, was walking about the streets as well as usual.

Case III.—On July 24th, 1877, I was requested to visit Mrs. H., a primapara, aged 18 years, who, as the messenger informed me, was "having a baby and having fits." When I entered her room she was in a convulsion. Her face was drawn to one side, her eyes were turned upward so that the whites alone were visible, and they seemed as if they were too large for their orbits; her tongue was protruded about an inch from her mouth, and was caught firmly between her teeth, and the blood was running slowly down her face from the corner of her mouth. She rallied in a short while and became at least partially conscious, and I then gave her one-fourth of a grain of the sulphate of morphia under the skin.

Her pulse was the most frequent, quick one I have ever seen in a case of puerperal eclampsia. Upon examination, I found the head of the child low down upon the perineum, and the midwife told me that it had been in this position for some hours.

While I was making this examination another convulsion came on, and as soon as it had passed off I applied the forceps and delivered her of a fine, lusty boy. Soon after this, I removed the placenta, after Credé's method, having given her a teaspoonful of the fluid extract of ergot as soon after the convulsion as she was able to swallow, and just before I applied the forceps. The womb contracted down firmly, and my attention being called to the child for a few moments, I was somewhat astonished when I went back to the woman to find the womb enlarged until the fundus was several inches above the umbilicus; in truth, it was almost as large as it was before the birth of the child.

Grasping it from above with both hands, I kneaded it upon the sides, and in front with my fingers, and was soon gratified to feel it contracting well and firmly down into the hypogastrium, although I was alarmed by the enormous quantity of blood lost. Another convulsion came on while I was still manipulating, but I continued to grasp the womb as firmly as was possible under the circumstances, and as soon as convulsive action had subsided, I applied a good firm pad over the fundus, and over it the binder

as tightly as it could be borne. When she could swallow again, I gave her another dose of ergot, and continued to give it for several days, together with chloral hydrate, bromide of potassium and veratrum viride.

This was her last convulsion, and to-day both mother and child are well and hearty.

The foregoing is a truthful, although imperfect, report of my last three cases of puerperal eclampsia. My other cases have all heretofore been duly reported; and yet I have a word or two more to say upon the subject, because I am especially anxious that my friends, at least, shall know exactly my position with regard to the treatment of this disease. Some of them, I am satisfied, do not know it, for they look upon me as an out and out Langrado!

In the first of the above three cases death was the result, and this is the only case I have lost, during a practice of twenty or more years, in which death could be attributed, either directly or indirectly, to the convulsions, or to injury brought about solely by the convulsions. I have lost two other patients, after having had convulsions, but from causes not in the least dependent upon, or in consequence of, the convulsions.

In the fatal case reported in this paper, there was evidently serious brain lesion brought about directly by the convulsions; and the question which now suggests itself most painfully to my mind is this: Did I not rely too much upon chloroform, and too little upon the lancet? I very much fear that I did. At any rate, if I had the case to treat again, at the second venesection I would take twenty, or even twenty-four, instead of twelve ounces of blood.

I have never lost a case in which I have bled largely; consequently I am a firm believer in the efficacy of venesection in puerperal eclampsia, and I believe that such cases may lose a larger amount of blood than any others with impunity. However, I want it distinctly understood that I *do not bleed every* case that falls into my hands.

In the second of these cases I bled twice quite freely, and both times with the very happiest effects.

In the last case reported I did not bleed, only because that terrible post-partum hæmorrhage saved me the necessity of doing so. Had she not have had this alarming hæmorrhage, and had

the convulsions continued to recur post partum, I certainly should have bled her, and bled her copiously; but nature, or rather accident, saved me the trouble, and the woman recovered. It may have been simply a sequence—a *post hoc*, and not a *propter hoc*, I care not which; but if she had not flooded, I should have opened a vein; and if I ever have a patient to die with puerperal eclampsia from whom I have abstracted none of the "liquid flesh," I shall always feel that I have neglected to give that patient the benefit of a most potent and highly endorsed remedy.

I am satisfied that the great reason why many intelligent physicians are opposed to venesection in such cases is this: Before they resort to it they are afraid of it, and consequently abstract too small a quantity of blood to be of any material service. In proof of this, not long since I heard one of my friends say that he "came nearer losing a patient with convulsions from whom he had abstracted eight ounces of blood, than any other case of the kind he had ever had." Now I insist upon it, that the loss of eight ounces of blood was much too small an amount to really jeopardize the life of the woman, even if she did not need it, and much too small a loss to be of any service as a remedy, if she did need it. The very idea of abstracting only eight ounces of blood, as a mechanical means of relief in a cerebro-spinal congestion, or a congestion of the kidneys, or a congestion of the lungs, with a laboring heart, seems to me preposterous, and more especially when that amount is taken from the vein of the arm, and not locally. I look upon such venesection as this, in puerperal eclampsia, as shooting straws against the wind; obstructing a whirlwind with a cobweb; smothering the flames of Vesuvius with a *small* wet blanket;

> "Stemming a stream with sand,
> And fettering flame with flaxen band."

A horse-fly or a musquito would not be more than surfeited by such phlebotomy as this, and a few Spanish leeches would count it no great task to do better!

I will never open a vein in such cases to take less than twenty ounces at the first bleeding; yet I freely grant that there are a few cases in which less potent measures may be all that is needed, and I admit that in taking blood in eclampsia we should measure the quantity by the effects produced. At the same time, allow

me to say that the effect which I wish to produce in such cases cannot be secured by so small a depletion.

I will not pretend to deny that opium, chloroform, chloral hydrate, ether, bromide of potassium, veratrum viride, active purgatives, cold to the head, etc., are not potent remedies for good in this disease, judiciously employed. I have frequently resorted to some of them, without the lancet, and often in connection with it; but in at least three-fourths of the cases such as I have had to deal with, I look upon blood letting as the remedy *par excellence!* as the best, the safest, the surest, the speediest, and the most reliable means of relief, and I look upon all other remedies as only *secondary to it—only adjuvants.*

I am surprised that some of our profession are so opposed to it—so loth to give it a fair trial—when it is remembered that such men as Ramsbotham, Meigs, Cazeau, Nagelé, Hartshorne, Barnes, Barker, Madden, Kenneday, M. Péter, Thomas, Lusk, White, Goodell, Joynes, Claiborne, Corson, and a host of other able men whose names might be mentioned, have advised and do practise it. Even Leishman says: "Perhaps, in some quarters, the rejection of the lancet has been too absolute. Indeed, we rather incline to this belief; for there are cases in which the constitution and temperament of the woman, along with the violence of the attack, might lead us, not unnaturally, to suppose that venesection would afford the best chances of recovery." We have very many such women as he speaks of in my country, and my opinion is, that when Leishman revises his book he will incline still more to this opinion, and will blow his horn with a less uncertain sound.

If I was confined to any three remedies in the treatment of puerperal eclampsia, I should rely upon blood-letting, morphia, and active purgatives; and if I could have but one remedy, I would choose that *little giant*, that "relic of barbarism," formerly known as the lancet.

Quinine in Epistaxis.—A writer in the London *Lancet* says quinine is *the* remedy in epistaxis. He says that he has tried it more than twenty times, often in aged people, and has never found it to fail.

ART. II.—*Sudden Death from Constriction of the Bowel, Complicated with Hæmorrhage.* By M. H. CRAWFORD, M. D., Assist. Surgeon, U. S. Navy, Maré Island, California.

Thomas Jackson, hospital cook, aged 28 years. I was called to see the patient at 1 P. M., June 13th, 1877. He complained then of a rather severe pain in the region of the stomach, with slight vomiting. I learned from the patient that he had been drinking very freely of ice-water, and as the weather was very warm at that time, I considered it a case of ordinary cramp of the stomach. Treatment: ordered hypodermic injection of Magendie's solution of morphia (14 minims). The injection relieved the patient very soon.

In my absence from the hospital during the afternoon and evening, Dr. W. G. Farwell, U. S. N., was called to see the patient at 6 P. M., and I am indebted to him for the particulars of the case during the night.

At 6 P. M., the patient was suffering from excruciating pain in the abdomen, especially to the right and a little below the umbilicus; he was unable to retain anything in his stomach; has extreme thirst; bowels have been costive for several days; abdomen tympanitic and very much distended and painful on pressure; pulse quick and rather weak; temperature and respiration normal; he is very restless; he lies on his back most of the time; ordered a sinapism to be applied to the abdomen, and to repeat the hypodermic injection of morphia.

7. P. M. Patient no better; pain has increased in severity; ordered the following mixture:

℞. Tincturæ opii camphoratæ.....f℥ss.
Tinct. capsici.....gtt.. x.

M. S. At once. Also to have ten grains of calomel.

9.30 P. M. Patient continues to grow worse. Abdomen very much distended; and he complains of most agonizing pain in the abdomen. Pulse quick and weak. Continues to vomit; the matters vomited are of a brownish color, and liquid in character.

℞. Liquor morphiæ sulphatis U. S. P.. f℥ij.
Sodii chloridi.....℥j.
Aquæ..... .....⊙j.

M. Ft. sol.—S. Use as an enema at once; ordered hot fomentations to the abdomen; repeat the hypodermic injection of morphia.

10.30 P. M. The enema passed from the bowels without any fæcal matter. The patient is very restless; has extreme thirst;

the stomach throws off everything that is taken; pain in the abdomen intense.

℞. Olei tiglii.....gtt. iv.

Fit emulsio. S. At once.

Ordered turpentine stupes to be applied to the abdomen.

11.30 P. M. Patient somewhat easier; he is unable to sleep; no action from his bowels.

1 A. M. Patient shows signs of marked collapse; pulse very feeble and slow; strength failing rapidly; abdomen very much distended.

℞. Spts. frumenti.

Spts. ammoniæ aromat.....a a f℥ss.

M. S. To be taken every ten minutes.

2.30 A. M. Patient is failing very fast; pain in the abdomen not so intense; complains of great weakness, and craves water all the time; same treatment.

9.30 A. M. Patient is almost collapsed; unable to detect any pulse in the radial artery; heart sounds quick and irregular; pain over the abdomen less; he has a very pale anæmic look, presenting the appearance of one suffering from internal hæmorrhage; his hands and feet are very cold; to continue the stimulants. Ordered warm bricks to be applied to the feet, with friction. The patient continued to fail until 9.30 A. M., when he expired; he seemed to die quite easy; he was rational up to the last moment.

An autopsy was made eight hours after death. Rigor mortis well marked. The body had a very white, sallow appearance; the abdominal region was opened; I suppose at least three quarts of blood flowed out; the intestines and other organs were perfectly flooded with blood. There was found a very tight constriction around the ileum, near its junction with the cæcum; the appendix vermiformis seemed to enter into the formation of the constriction; the diverticula or band of lymph material seemed to extend from the appendix vermiformis around the ileum and cæcum; and a portion of what was supposed to be the ileum had passed between the false band and the appendix vermiformis, until the circulation in the large intestine, and in the portion of the small intestine that had passed through this abnormal opening became obstructed. The large intestine, with the portion of the ileum that was below the constriction, was very dark colored and much congested; there was but very little fæcal matter found in the intestines; heart, lungs and brain in their normal condition.

The sudden death of the patient was produced by hæmorrhage. The most difficult question now to solve is, what produced the

sudden hæmorrhage; the only way that it can be accounted for is, that it was occasioned by the constriction interfering with the return of the venous blood, while the constriction was not tight enough to stop the arterial blood, which continued to pass the constriction, until the vessels were so much distended, that it resulted in rupture of some of the smaller blood vessels of the intestines.

I learn from Dr. Anderson, of Vallejo, Cal., that the patient, previous to his employment at the hospital, was subject to paroxysms of pain in the abdomen.

I am unable to find any case on record where death occurred so soon after the constriction of the gut, it being only twenty hours after the first symptom till he expired. Sir Thomas Watson mentions two cases where death was produced by constriction of the gut in the same location as in the case I report, but in both of his cases, death did not occur for several days after the first symptoms of obstruction.

Dr. Brinton states as the result of statistical calculations, that in fatal cases arising from sudden constriction of the gut by bands of lymph, the average duration of the malady is about five days.

I suppose surgical interference in this case would have been successful, if the operation could have been performed soon after the first symptoms made their appearance; but under the circumstances, would a surgeon have been justifiable in performing this grand operation so soon, and where nothing definite could be determined in order to localize the obstruction? There was no stercoraceous vomiting; nor could I detect circumscribed enlargement or tumor in any region of the abdomen.

Clinical Reports.

Traumatic Neuralgia—Non-Inflammatory Softening of Brain—Operation—Death. By T. N. Clark, M. D., Reagan, Texas.

Mr. G. K., aged 30, married, a planter, in 1865, received a blow on the left side of the head, producing a comminuted fracture across the vault of the skull. Several long spiculæ of bone

were removed by the attending surgeon on the second day after the accident. In due time the wound healed—not, however, without leaving some paralysis—hemiplegia, I believe.

During a rather tedious convalescence of three months, he had, besides the occasional attacks of hemiplegia, neuralgic pains, commencing at or near the seat of the fracture, and radiating over and through the head to the temple on the opposite side. Any cause which fatigued or suddenly impressed the nervous system—as loss of sleep, mental application, exposure to atmospheric changes, etc.—would bring on these attacks. Thinking that time, aided by a naturally vigorous constitution, would overcome this morbid sensibility, he sought only such treatment as his family physician suggested, until his sufferings became so constant that he went North for medical advice. But failing to obtain relief, he went to Florida, and then moved to this State in 1875.

For a short time after his arrival here, he suffered less, except from sudden alternations of temperature; yet he had constant feelings of uneasiness, irritability of temper, moroseness, dread of some impending evil, such as an attack of apoplexy, epilepsy, or paralysis. All the determined effort he could command to overcome these apprehensions were futile. His manner became eccentric, his life unhappy, and his mind a prey to evil forebodings.

In September, 1876, I was called to see him. He was suffering from violent paroxysmal attacks of neuralgia, which started about the point of fracture, and involved the entire left side of the head and *right* temple. Upon examination of the head, I found an indurated, depressed cicatrix, dipping deep into the groove, caused by non-union of bone, beneath which the pulsations of the cerebral vessels were plainly visible.

I prescribed fluid extract of gurana and morphine, which soon relieved him. After this, I heard nothing more from him until the night of January 1st, 1877, when I found him suffering from a more violent and persistent attack of neuralgia than ever before; this attack commenced on the 15th of December, and increased in severity nightly, up to the time of my visit. He now suffered also most excruciating pain in the left pectoral, præcordial and hypogastric regions—the pain being suddenly reflected from one point to another, and thence back to the head. The indescribable torture he compared to red-hot bolts of iron driven through the brain. Morphia and bromide of potassium in full doses failed to relieve him after two hours; then the doses were nearly doubled, and half a drachm of chloral hydrate was added. After another hour of continued suffering, I added fifteen drops

of tincture of gelseminum and half a grain of extract of belladonna. Even this "heroic" dose was repeated before his wild excitement was reduced to incoherent mutterings, succeeded by a sleep of six hours' duration.

On the following morning, he awoke with the inevitable dull, throbbing headache. As this had been the most protracted attack he had yet suffered, he fancied, and I hoped, that he would now enjoy an immunity of a few weeks at least; and with no other symptom than nervous irritability, the result of the previous week's suffering, he passed through the day. I prescribed, for the purpose of fortifying his system against a repetition of a similar attack, iron and quinia, in conjunction with potass. bromide and belladonna—alternating the doses through the day, so as to fully impress the nervous system before 8 P. M.—the usual hour for the return of the paroxysms.

Greatly to my surprise, however, I was called in haste to see him at the usual hour, and, as on the previous night, found him suffering intensely with his head. In addition, he now had a strange assemblage of symptoms, not heretofore present, and of sufficient gravity to justify the apprehension of some lesion of an intra-cranial character. He compared his head suffering to a "red-hot bolt driven through the brain" from the left temple to the right, and every throb of the pulse corresponding to the blow of a sledge-hammer. With the characteristic suddenness of nerve pain, his sufferings would, in a short time, be transferred to the bowels and heart; and after an hour probably of extreme suffering, the pain would be again reflected back to the head. Protracted nervous rigors would occur, during which every extensor muscle was stretched to its uttermost tension. He had a feeling of progressive paralysis, commencing at his head, hands and feet; the two opposite "currents" approached each other in the abdomen. He described this aura as a feeling of total insensibility of the cutaneous surface and of muscular power, lasting, however, only a short time before the parts became again sensitive to the touch. Aphonia was also a prominent symptom during every nightly aberration of nervous energy, but would last only during the continuance of his most exaggerated suffering. A suffocating or smothering sensation was also complained of; a very imperfect use of the tongue; constant numbness of the extremities; occasional emesis, and many other transient, singular and perplexing symptoms, ever varying in character, in the manner of approach and departure, and consistent only in the extreme suffering they produced, by which the patient for the time was deprived of reason. So violent were these nightly attacks, that he would lose all self-control, and even consciousness of everything

except the agony. Being generally rational until his suffering reached its climax, he would now, however, imagine the interposition of friendly restraint to be the menace of deadly foes; and with the momentary inspiration of insane energy he would struggle until exhausted, and then sink into stupor. After half an hour he would, on recovering consciousness, complain of a dull, throbbing headache, with no recollection whatever of the violent struggle in which he had been so recently engaged, and would talk invariably of anything, of everything, in a conversation with the watchers around his bed until falling asleep—the conjoined result of nervous exhaustion and the effect of powerful narcotics, which had been given as often as prudence would justify.

This "phenomenal neuralgia" continued until the first of March (two months) without improvement. On the contrary, there followed a successive development of grave and threatening symptoms, too violent and too persistent to result from nerve irritation caused from cicatricial pressure.

Throughout the eccentric course of the disease, all of the organs of secretion and excretion were normal in functional activity. There was, until near its termination, an entire absence of pyrexia. The appetite was generally good; yet, there was very perceptible emaciation, and the patient complained of gradually increasing debility.

As the patient's surroundings were malarial, his liver was kept in a healthy condition by occasional mild mercurials combined with quinia, the quinia being continued during the intervals.

During the two months confinement, previous to operation, every rational and empyrical therapeutic suggestion was tested, and yet there was perceptible increase in the severity of paroxysms. The patient and family abandoned all hope of cure, unless by the aid of surgery; and at his suggestion, Dr. H. W. Brown, of Waco, was called, who concurred in the propriety of an operation, although not feeling assured of its success.

After some little trouble in producing etherization, Dr. Brown dissected the cicatrix smoothly from its attachments, brought the edges of the wound together, and confined them by three sutures, over which were placed adhesive straps, giving ample support—and a pad, dampened with carbolic acid lotion. For the first time in two months, probably from the loss of blood, he slept that night without excessive head suffering. During the four days which followed, the nightly paroxysms seemed to be very much modified by the operation; the patient complained only of an old, throbbing pain, with occasional exacerbations. The stitches were drawn out, and the wound was healing without suppuration

or œdema. The appetite was good; there was no fever, yet, the patient complained of extreme debility and seemed despondent.

On the morning of the sixth day, I discovered some little difficulty in articulation, and general prostration was very apparent. In the afternoon, I was called in haste, and found him suffering more intensely than ever with his head and back. After the exhibition of a large dose of chloral and morphia, and chloroform as counter-irritation to the lumbar region, he recovered sufficiently to detail the symptoms of his attack up to the time of my visit. While watching the effect of the medicine just administered, he suddenly jerked his head twice in quick succession, downward toward his chest and shoulders, as though stunned by violent blows, raised his hands to either side of the head and uttered a suppressed, peculiar scream or groan, so terrible in expression of supreme suffering, that some of the attendants hurried from the room; then, without uttering a word, other than an occasional groan, he lay for several minutes as though he feared the movement of a muscle might induce the repetition of the same torture.

To persons who may have seen an animal stricken down by a violent blow on the head, and quivering in a convulsive tremor, this particular symptom, on which I feel disposed to lay a great deal of stress, may not seem unintelligible. To my mind, it was the only one in the long and capricious train, which furnishes *positive* indications of an intra-cranial disease; and the only one, from an analysis of which, can a satisfactory diagnosis be reached, or any definite idea be obtained of the underlying morbid pathology. Under the influence of morphia, he passed through the night without more than ordinary suffering, and seemed stupid at the time of my visit on the following morning. He wished to talk of his condition, but told me he could not use his tongue. His condition mentally seemed as that of one conscious of his fate, and with a feeling of stolid indifference, resigned to it.

I left him, without any doubt of immediate paralysis; and on the following morning, found him with hemiplegia of the right side. Mind dull and listless; no appetite; pulse small and feeble; surface bathed with perspiration; paralysis of tongue and lips partial; deglutition difficult and painful; inflammation of right conjunctiva, with suppuration; extremities of right side cold; increasing stupor. During the succeeding day, general paralysis of all voluntary muscles followed, and medicines and nourishment were given by enemata.

For three days, with eyes half closed, he lay in this hopeless condition; and by no ingenuity could any expression of his feelings or his wants be elicited. Without any change save that of

increased feebleness and frequency of pulse, and complete coma of twelve hours duration, he reached the climax of ordinary human suffering, and, doubtless, found in the last moment, the consciousness of relief.

The foregoing imperfect report—imperfect from the difficulty of portraying accurately the caprice which characterized the nightly exacerbations covering so long a period—is one, it seems, of more than ordinary interest, if from its symptoms, analyzed and compared, we may be enabled to correctly understand the morbid conditions or the pathological changes, whether nervous or vascular, which they represent.

So multifarious are the expressions of diseased nervous action generally, that pathologists have furnished no unerring guide for diagnostic purposes. Among diseases of the nervous system so often underlying the veil of deep obscurity, there are none, perhaps, more liable to mislead the judgment, than those of an intracranial character, as for instance, extravasation, tumor, abscess, inflammatory and non-inflammatory softening. But whether characterized by an indefinite period of time covering the often obscure phenomena of development, or rapidly ushered in with pyrexia, and terminating in the acute form, there are yet many symptoms common to each, with frequently no constant assemblage sufficiently preponderating in diagnostic value to positively indicate the character, extent or degree of structural change or arrest of function.

The foregoing report shows this case to have been, in the beginning, evidently one of traumatic neuralgia. Whether or not it had its origin primarily within the skull or without, is not so much the question at issue, as the character and condition of the lesion at its termination. That the brain was involved and subject to a slow and gradual disorganizing agency, from the healing of the superficial wound till the time of the patient's death, seems to me more than probable. The symptoms immediately prior to the paralysis, indicate with much certainty, in my opinion, the yielding of an artery or the bursting of an abscess within the cerebral structure; and by differentiation, in the absence of positive knowledge, I can only diagnose the case as one of non-inflammatory softening of the brain.

[Unfortunately, the failure to secure an autopsy makes the report of this interesting case incomplete.—Ed.]

A Case of Syphilitic Phthisis Pulmonalis. By C. A. Bryce, M. D., Richmond, Va.

Two and a half years ago, I was called to see M. S., a colored man about 30 years of age. I found him apparently in the last stage of consumption; pulse 130; respiration rapid and short; skin bathed in a profuse perspiration; distressing cough, and an abundant expectoration of pus. He had been having colliquative night sweats, and all of the symptoms of advanced phthisis. He had been regularly attended by a physician, and had been told that he was dying of consumption, and the doctor had discontinued his visits. The messenger who came for me told me that she only wanted somebody to see him before he died, as something might be done to give him temporary relief.

I have described the condition in which I found the man, and but for his having been a patient of mine on a previous occasion, I should not have given him an examination at all—his case at first sight appeared so hopeless. But I remembered that he had been to my office some eight months before, for treatment for syphilis. At that time, he had indurated chancres and two buboes. From some cause, he failed to come to see me, and the treatment was incomplete. I knew, unless he had been treated by some one else, he was still laboring under constitutional syphilis. He informed me that he had received no other treatment for the syphilis. It occurred to me that this man might not be laboring under tubercular disease at all. Percussion and auscultation revealed the presence of several vomicæ, although there was such a confusion of sounds in the lung that I could not make a very nice diagnosis.

In reviewing the case, I could find no hereditary tendency to tuberculosis; he had had no hæmorrhage, but had the other symptoms of constitutional syphilis before his lung trouble came on.

I concluded that if this was true tuberculosis in its advanced stages, one plan of treatment would be no better than another; the result of any treatment would be the same, and he would have but a short time to live. Therefore I determined to treat him for syphilis of the lung. I put him in his debilitated condition upon

℞. Hydrarg. chlorid. corrosiv.....gr. ij
Aq. distil..... ℥j
Spts. vini gallic.....
Elix. calisaya..... aa ℥ij

M. S. Teaspoonful three times daily.

Discontinued the cod liver oil he had been taking, allowed him a generous diet—milk, eggs, beef, &c. Also gave him

℞. Hydrarg. chlorid. mite.....
Pulv. opii.....
Ext. hyoscyam..... āā gr. j

M. Make one pill. S. Take at bedtime.

Kept him on this pill until the gums were slightly touched, when I discontinued the pill, but kept up the other mercurial for six or eight weeks. Other minor matters were attended to as they presented. In one week's time I could see that he was better; in three weeks I felt assured he would recover, and in four months the patient was at his daily work.

I have but few comments to make on the case. I would call attention to the importance of a clear diagnosis in cases of this kind. A patient may have phthisis of the lung, and yet not have tuberculosis. The *cause* of the patient's phthisis is the question, and upon it devolves, in great measure, successful treatment. Now, in the case above detailed, I only had the previous knowledge of the patient's syphilis, and the results of the treatment, to confirm my diagnosis; and there is no question in my mind about the man's having had anything except syphilis, with all of its varied symptoms throughout.

Exstrophy or Extroversion of the Bladder. By J. E. Bennett, M. D., Fort Smith, Ark. (Read before the State Medical Society of Arkansas.)

On taking medical charge of the prisoners in the United States jail, at this place, in the fall of 1876, I found among them a case of exstrophy of the bladder.

This malformation which, according to Dr. Gross, is the only one of the bladder of any surgical interest, I find so well represented by a wood cut on page 804 of vol. II of Dr. Gross' Surgery that I would respectfully refer those who may be interested to it.

This congenital deformity consists in the absence of the anterior wall of the bladder—the posterior portion presenting itself through an aperture in the walls of the abdomen, and at this spot the umbilical cord was situated; consequently no umbilicus is to be found. The penis is wanting, and in its place is found a mere nodule, which is imperforate. The orifices of the ureters are situated at the inferior part of the bladder, and are about two to two and a half inches apart. At my request, Dr. A. Dunlop,

in the presence of Drs. DuVal, Eberle and Booth, of this place, introduced a fine gum bougie, nearly eight inches up the ureters toward the kidneys. An attempt to penetrate the seminal vessels produced so much pain that the attempt was abandoned.

The posterior walls of the bladder being pushed forward, forms a tumor about the size of a large orange; its surface is red, vascular and sensitive, and seems to be covered with a thick, glary mucus. The urine drops constantly, drop by drop, from the ureters, rendering the presence of the subject disagreeable to those who come in contact with him, from its odor.

The bodies of the pubic bones are wanting in this case, and the groins are the seat of hernia.

The testicles are normal in size, but are enclosed on either side in a cutaneous sac, instead of a pendant bag. As a matter of course, the individual is impotent, although, as he informs me, he has desires for the other sex, and often has nocturnal emissions. The scrotum is covered with hair, which is bleached with the chlorides from the dropping urine.

Mr. J. W. Edwards, the subject of the foregoing notice, is 30 years of age; is the sixth of twelve children; all of his brothers and sisters except himself are married and have children. With the exception of his deformity, he is healthy, can cut wood, maul rails, or handle a rifle equal to any backwoodsman in the country.

Removal of Urethral Calculus in a Child by Urethotomy. By Gavin Rawls, M. D., Carrsville, Va.

On the night of August 7th, I was called to see a boy, aged 4 years, who had not passed water for 36 hours. The bladder was greatly distended, and the effort to urinate was exceedingly painful. On attempting to pass a sound into the bladder, it struck a foreign body in the urethra, just in front of the prostatic portion. I recognized the presence of a stone which had escaped from the bladder, but it was too large to pass through the urethra. It was firmly lodged and would not move either way. I did not try hard to push it back, however, for obvious reasons. Using the sound as a guide as in lithotomy, I made an incision about an inch long in the under portion of the penis, and just in front of the scrotum where the membranous and spongy portions meet (the incision being about equally divided between the two), and removed the stone. The stone was about the size of a pea, weighed four grains, and was very angular. There was no other stone in the bladder. For one year he had been suffering with this stone, and it had begun to impair his health.

The water in the bladder did not flow out after the removal of the stone, owing to the swollen condition of the parts, and as I had no catheter small enough, I directed a warm hip bath, after which he made water freely. Only once did any water pass through the wound, and it healed up readily without trouble and leaving no tendency to hypospadias. The child is now well.

A Case of Poisoning by Strychnia, treated by Bromide of Potassium and Chloral Hydrate—Recovery. By A. M. RAGLAND, M. D., Pilot Point, Texas.

Mr. G. McA., an elderly gentleman, whose health has not been good for some years past, had been troubled for some time by night sweats. On the evening of Aug. 29th, 1877, he was left alone by his family, who were attending Divine service at a camp-ground near by. Shortly after the departure of the family to church, about 7 P. M., he took what he supposed to be a dose of quinine from his vest pocket and swallowed it, but whether with suicidal intent or not is uncertain. On my arrival (some three hours after he took the dose), he quickly informed me that he had taken poison.

The symptoms confirmed the statement of the patient as to his having taken poison. Violent convulsions rapidly succeeded each other without the least disturbance of the patient's mental faculties. Fortunately for the patient, the convulsions affected more markedly the muscles of the extremities and back, and did not seriously interfere with deglutition or respiration.

At the late hour at which I saw the patient, I deemed it unnecessary to use any effort to dislodge the poison from the stomach, as it must have passed into the system.

Noting the extreme excitability of the nervous system (merely touching his hand would precipitate a convulsion), and recalling the fact stated by eminent authors, that a state of active congestion or hyperæmia of the spinal axis occurs as the effect of strychnia poisoning, I gave forty grains of bromide of potassium and eight drops of Norwood's tincture of veratrum viride. In fifteen minutes I repeated the potassium, with fifteen drops of Tilden's extract of ergot.

Having a small quantity of chloroform (not more than a drachm), I got the patient to inhale that with some relief to violence of spasms. Not having more, I substituted chloral hydrate which I combined with bromide of potassium, in doses of ten grains of the former to twenty of the latter. I repeated this dose every fifteen minutes for one hour, when the violence of the con-

vulsions was greatly diminished, and intervals of five to ten minutes of repose occurred. Two hours from the commencement of treatment the patient was free of convulsive attacks and sleeping quietly. Bromide of potassium and chloral were continued during the remainder of the night and following day at intervals of three or four hours.

Luckily, a small part of the supposed poison was found and handed me next day, and I was enabled to confirm the diagnosis by an analysis of the article swallowed. On submitting it to the test by bi-chromate of potash, a beautiful violet was developed.

Jaborandi in a Case of Diabetes Mellitus—Successful. By JOHN H. POOLE, M. D., South Mills, N. C.

Mr. W. C. P., aged 29, single, came under treatment Nov. 11th, 1876. The case presented the following symptoms: Considerable emaciation; skin hard and dry; bowels constipated, and feces solid and free from moisture; tongue dry, parched and sticky; thirst inordinate and insatiable; appetite keen; urine transparent, of a pale straw or greenish tint, and emitting an odor like sweet apples or new mown hay. Specific gravity 1040; quantity voided, 17 to 20 pints in 24 hours, and leaving white spots of diabetic sugar whenever sprinkled on the pants, and attracted large numbers of flies when allowed to stand any length of time in the chamber. The patient also complained of a feeling of emptiness of the stomach, great debility, chilliness of the extremities, an aching sense of weariness in the loins and legs, and considerable *ennui;* an uneasiness in the stomach after meals; flatulence and acid eructations; dimness of vision; redness of the gums and mouth, and peevishness of temper.

On evaporation, I obtained a deposit of crystaline diabetic sugar.

From the time of seeing Mr. P., Nov. 11th to Feb. 11th, I had him on opiates, tonics, bi-carbonate of soda (as recommended by Dr. Clark in the *American Journal of the Medical Sciences*, vol. xxxvii, p. 575), creasote and the resinous cathartics, as aloes, rhubarb, &c. I confined him to a meat diet exclusively, and guarded him against the vicissitudes of our very severe winter.

Feb. 11. After the above treatment had been persevered in for three months without any material change in the symptoms, I determined to put the patient on fluid extract of jaborandi in connection with iron and quinine, allowing him nothing to drink but tar water. The first dose (℥j) of the jaborandi produced considerable diaphoresis and salivation, so much so that the flow of

saliva was continuous from one dose to the other, given three times a day, although the diaphoresis commenced about an hour after taking the medicine, and continued only about one hour. Each dose produced the same effect.

Feb. 18. The patient has been improving; urine diminished one half; specific gravity 1030; very little thirst; general weariness and *ennui* diminished.

March 20. Treatment continued without any variation, and the patient's condition very greatly improved. Not necessary to void the urine but once during the night. Specific gravity normal; flesh increased; skin soft and moist; thirst entirely relieved; appetite good and natural, and salivary glands active.

Aug. 27, 1877. I consider Mr. P. as well as he ever was, though I continue the fluid extract of jaborandi, and restrict him to animal food.

Was the above a case of diabetes mellitus or insipidus?* If the former, is he cured, or is the disease only held in abeyance by the treatment continued in a modified degree to the present time? The high specific gravity of the urine, the saccharine matter it contained, and all the symptoms enumerated go to make up the diagnosis of diabetes mellitus.

Original Translations.

From the French and German. By Wm. C. Dabney, M. D., Charlottesville, Va.

Paralytic Luxations of the Femur.—At the recent meeting of the "Association Francaise pour l'Avancement des Sciences," M. Reclus read a paper on this subject, of which the following abstract is published in *Le Progrès Médical* of Sept. 1st, 1877:

Since the masterly description of Dupuytren, those displacements of bones which existed at the time of birth have been known as "congenital luxations." Since that time, Bouvier and Broca have extended the definition so as to include not only those dislocations actually existing at birth, but also those cases in which it was certain that a dislocation would occur as the development and growth of the parts progressed. To these two classes of luxations, ordinarily known as "congenital," Verneuil

*The symptoms, etc., as described by Dr. Poole, certainly point to diabetes mellitus, but we would have been glad had he left no possible ground for conjecture, by making a thorough chemical analysis of the urine. At any rate, the report as given is very valuable as indicating the value of jaborandi.—Editor.

has shown that it is necessary to add a third, which is more frequent and more important than either of the preceding [but which does not belong in the category of congenital luxations proper]. In the third class are included all those dislocations which are caused by atrophy of the muscles which surround the joint—the atrophy itself being due to infantile paralysis.

M. Reclus, in the present paper, reports five cases which have not heretofore been published. In the two first cases, which occurred in children suffering from infantile paralysis, there was atrophy of the muscles extending between the pelvis and the trochanters, and also of the muscles of the buttock; the adductors of the thigh remained sound. In these cases, there resulted an "iliac luxation." In the third case, the atrophy destroyed the functional activity of the psoas and the adductors; the muscles of the buttock and those passing between the pelvis and trochanters remaining healthy. A sub-pubic luxation ensued. Finally, in the last two cases, all the muscles around the hip-joint were atrophied. In these cases there was great laxity of the articulation, and the head of the femur very readily slipped from the acetabulum, but there was no regular and permanent dislocation. M. Reclus states that the most frequent form of dislocation is the iliac. [Charcot has recently reported a case in which there was ileo-pubic dislocation of the left femur; ilio-ischiotic of the right; sub-coracoid dislocation of the left humerus, and numerous fractures—all coming on spontaneously in an ataxic. *Lecons sur les Maladies du Systeme Nerveux*, tome II, 4th fascicule, p. 365–373.]

The Connection between Locomotor Ataxy and Injuries.—M. Verneuil, in the name of Dr. H. Petit, presented a paper on this subject to the "Association Francaise," &c.

M. Petit reports the following case: A patient applied to M. Guerin to be operated on for hydrocele. No immediate accident followed the puncture. The patient was an old ataxic, however, and had been under the care of Duchenne for the disease—the symptoms of which were now quiescent. The day after the operation, the ataxic symptoms returned with great severity; in the lower limbs there were very severe "electric pains," and subsequently there was retention of urine, which required the frequent use of the catheter for its relief. The pain and paralysis of the bladder were with difficulty overcome by the use of bromide of potassium and electricity.

M. Petit has endeavored to find answers to the following questions which were suggested by this case: (1) Is locomotor ataxia ever caused by injuries? (2) Is a pre-existing ataxia influenced

by an injury? (3) Does an injury in an ataxic present any peculiarities in its course and termination?

His studies have led him to the following conclusions:

(1) It is possible that locomotor ataxia may have a traumatic origin, but no case of this kind has as yet been reported.

(2) In subjects predisposed to this disease its development may be hastened by an injury, and it is certain that an ataxic apparently cured may have a relapse in consequence of an injury, and that a co-existent ataxia may be aggravated in the same manner. Some writers think, says M. Petit, that an ataxia may sometimes be cured by a surgical "wound," but he thinks it far more probable that in these cases the symptoms were caused by reflex irritation—as in phimosis, for example.

(3) In answer to the third question, M. Petit says that it is well known that trophic disturbances occasionally occur in the course of locomotor ataxia, and that it is reasonable to suppose that injuries would be modified in their course and results by this disease.

M. Verneuil stated that he had seen one case of locomotor ataxia cured by castration. [Such favorable results could only occur in the early stages, before the sclerosis of the posterior column had progressed at all.—W. C. D.]

Injuries in those Suffering from Alcoholism and Diabetes Combined.—M. Verneuil has recently called attention to the course and result of injuries or wounds inflicted on persons who are diabetics and at the same time are suffering from alcoholism. (*Le Progrès Médical*, Sept. 1, 1877.) He reports three most interesting cases. They show that the least little prick on such persons is exceedingly serious, and frequently results in death. Two of these patients were wine merchants, and suffered from diabetes. In each case, a slight prick of the finger was followed by swelling and inflammation of the hand and arm, which resulted in gangrene, and finally caused death. In the third case there was no injury, but the patient suffered from strangury, and a sound was passed. A purulent cystitis resulted, to which was added nephritis, and death resulted.

In this connection, M. Galezowski stated that he operated for cataract in simple diabetics without fear, and had always obtained good results, but in the only three cases where such patients also suffered from alcoholism, the eye was destroyed by suppuration.

Inflammation of the Radial Nerve.—M. Degrève reported a case of this to the "Association Francaise," &c., which presented some singular features. His patient was a man who, in the month of July, was taken with pain in the right arm, and at the

same time little patches of vesicles appeared very much like zona. After fifteen days these disappeared, but the pain persisted. Morphine was sprinkled on blistered surfaces, and quinine, arsenic and iodide of potassium were used without benefit. Paralysis came on in the regions supplied by the radial, but it was not complete. The muscles commenced to atrophy. Induced currents caused no contraction in the muscles supplied by the radial, nor did continuous currents have any effect in this respect, though there was an evident improvement in the other symptoms. The patient at this time ceased to attend, and did not return for three months. His condition was then much the same, except that he complained of pain in the left temporal region. The application of electricity [galvanism?] to the muscles of the arm brought about a complete cure. The patient had had some trouble about the head, accompanied by defective vision, which disappeared when the neuritis was relieved.

Treatment of Carbuncles by Injection of Carbolic Acid.—Dr. Clever, in the *St. Petersburgh Med. Woschenshrift* for July 14, 1877, reports a case of this sort. His patient was a woman about sixty years old, who had suffered for years from congestion about the portal system. On the 10th of May, she had a severe chill, due to a carbuncle in the right gluteal region, which at that time measured seven or eight inches in diameter. It was very hard, apparently extended deep into the tissues, was of a bluish-red color, and very painful. From numerous little openings on the surface, a clear, reddish fluid exuded. In consequence of the age and reduced condition of the patient, the prognosis seemed very unfavorable. For six or eight weeks the patient continued in much the same condition—the treatment during that time consisting in the application of poultices, punctures, and cleansing applications. As the patient seemed to be losing ground, Dr. C. determined to try as a last resort the subcutaneous injection of carbolic acid. A two per cent. solution was employed, and of this five syringes full were injected daily at one sitting. Four of the injections were made at different points of the circumference of the carbuncle, and one in the middle of it. After four days, when twenty injections had been used, the infiltration of the surrounding tissues had greatly lessened. Even after two days there was much less pain and fever. A brownish-red pus commenced to flow freely from the openings previously mentioned. In a few days the patient was sitting up, and recovery rapidly progressed

The Internal Administration of Opium in the Photophobia of Scrofulous Children.—Dr. Fried Betz (*Memorabilein*, 7 Heft, 1877), for the photophobia of scrofulous children, recommends the use

of laudanum, given internally, in doses of five or six drops to a child two or three years old. The dose should, of course, depend on the age. Besides this, he applies a bandage wet with cold water, which should extend from one temple to the other, and which should be sufficiently broad to cover the forehead and the upper half of the face. In very severe cases, he thinks an ice compress would be advisable. By far the most important thing, however, is the tincture of opium. He gradually increases the number of drops administered till good and refreshing sleep is produced, and he then keeps at this dose. The sleep of children suffering from photophobia is usually very restless and disturbed. The first evidence of improvement is the opening of the eyes when the child awakes in the morning. The action of the opium is sometimes so prompt that considerable improvement is apparent after a single application, and the intolerance of light will completely disappear after two or three applications.

To prevent relapses, Betz continues the use of the opium every evening for some time after the case is apparently well, and he says that children seem to improve on it.

Analyses, Selections, &c.

New Method of Reduction of Dislocation of the Hip.—Dr. S. J. Allen, of White River Junction, Vermont, describes his method in the October No., 1877, of the *Ohio Medical and Surgical Journal*. In March, 1841, Mrs. Perry, aged 40 years, near Newport, N. H., in stepping from a door, fell upon the icy ground. As two men were assisting her inside the house, the Doctor noticed that the right foot turned in upon the dorsum of the left. After she had been placed in bed, he grasped the leg with his right hand, and Dr. A. flexed the leg upon the thigh, at right angles with the body, which caused pain. The limb became fixed in the position thus given it, and could not be moved without considerable force and pain. With the view of relieving the patient, the Doctor stepped upon the bed, and, standing with her limb between his own limbs, he placed the dorsum of her foot upon his nates, and his right hand under the bend of her knee, and then lifted her hips from the bed, holding her steadily in that position for a few seconds. The head of the dislocated bone slipped into the socket, accompanied by that peculiar audible shock which is characteristic of reduction. She immediately exclaimed, "I am well!"

July 16, 1872. Dr. A. was called in consultation with Dr. Sperry, of West Hartford, Vt. Lewis Baumhar, while attempting to carry a railroad track rail on his shoulder, fell on his right knee, the rail falling upon the sacrum, dislocating the right femur upon the dorsum ilii. After the patient was fully chloroformed, and the muscles thoroughly relaxed, Dr. A. stepped upon the bed, and flexed the leg upon the thigh, and the thigh at right angles with the body; he then placed the patient's foot between his legs, and his hand beneath the bend of the knee; he now lifted the hips well from the bed, and held them immovable in that position. In less than half a minute the head of the thigh bone returned into the socket with a sensible and audible shock.

September 25, 1874. Dr. A. was called with Dr. Davis, of Lebanon, N. H., to a brakeman on the railroad, who, while coupling some cars, had his right femur dislocated on the dorsum ilii. After the patient was chloroformed, the dislocation was reduced in the same manner and with the same facility as in the case of Baumhar.

January 13, 1877. Dr. A. was called in consultation with Dr. B. F. Eaton, of Hartford, Vt. A freight brakeman had his left hip dislocated while coupling cars. After Dr. E. had chloroformed the patient, Dr. A. returned the dislocated bone to its proper place in a half minute.

"These four cases are all I have to relate, as testing this new, easy, and, I claim, unfailing method of reducing luxations of the hip joint. It will be noticed that they are all cases of dislocation on the dorsum ilii; but at the same time we should be reminded that the dislocation on the dorsum is the type of all luxations of the femur, and that before the reduction is accomplished in other and rarer forms, the head of the thigh bone is thrown on the dorsum by manipulation before it can be returned to the acetabulum. Indeed, it is not uncommon for the femur to be changed from one position to the other several times during the manipulations, before it can be returned to the socket, in cases of pubic and ischiatic forms of displacement, by the method of Nathan Smith.

"By my method, the lower part of the body is lifted from the floor and held immovable. This manœuvre relaxes the femoral ligament, and the weight of the hips and opposite limb rotates the body outward, producing sufficient abduction and extension to quietly draw the acetabulum over the head of the femur.

Amyl Nitrite in Exophthalmic Goitre.—The following very striking case is reported in the *Practitioner* (Amer. edition), for September, 1877, by Edward T. Blake, M. D., Reigate:

April 23, 1877. Mrs. L. Q., aged 45, widow of a military officer. She has lived nineteen years in India, whence she has just returned. She has light hair, is of spare habit and medium height. The face is flushed and sunburnt; the eyeballs, especially the right, are very prominent, giving to the patient the appearance of being half strangled. The neck is thin; the jugulars full; the throbbing of the carotids plainly visible. The right lobe of the thyroid is much enlarged; the left less so. She had chicken-pox, measles and whooping cough before the age of ten. The catamenia appeared at 16, preceded by languor and "fainting fits." She married at the age of 26. At 28 and 29 she suffered much from "diarrhœa" and "fever" (dysentery and paludal fever). Soon after this, she lost her husband, and, growing weak and thin, she came home, being then 30 years of age.

In October, 1875, aged 43, she had rather severe uterine hæmorrhage for ten days, and from that epoch she dates her illness. She says: "From that time I have never been quite well; I have always felt tired; I have been troubled with incessant thirst, with little appetite for food." The periodic flows finally left her at the close of 1876. During the last four or five years, there have been occasionally piles, and sometimes vulvæ pruritus. The memory has been certainly impaired for the last twelve months.

In July, 1876, she first perceived a swelling on the right side of the larynx; soon afterwards she found the left eye ball becoming protuberant. Ere long the left lobe of the thyroid began to enlarge; this was followed by prominence of the right eye.* The neck was rubbed with unguen-iodid., and afterwards emplas. belladon. was applied, but without much benefit. Falling of the hair over the optic apparatus was not present in my case; but a peculiar condition of the nervous system was very marked. The patient was fluttered and disturbed by the approach of a stranger, and there was much general muscular

*This cross method of the eye and gland affection was, I believe, first observed by Dr. Burney Yeo, in a paper read before the Clinical Society on 9th of last March; his paper may be seen in the *British Medical Journal* for March 17th, 1877, p. 320, where there is a capital illustration of a right goitre with a left exophthalmos. In his admirable summary he draws attention to our points:

1. The order of evolution of the phenomena.
2. The occurrence of unilateral exophtalmos as well as unilateral goitre.
3. Coincident alopecia of cutaneous tracts adjacent to the enlarged eyeball.
4. Important diffused phenomena, as: recurrent diarrhœa, profuse perspiration and emotional excitability of the nervous system, so frequently ignored.

tremor; this was first observed in the legs in October, 1875; in the arms not till the spring of 1876. With the exception of her very œdematous legs, she is now much emaciated. Beyond the failure of memory, so common after the climacteric, there are no mental nor cerebral symptoms whatever; she has, indeed, taken a desponding view of her case during the last six months, and for the same length of time has observed a progressive impairment of the vision of both eyes. The face and neck are always flushed, the veins of the forehead especially prominent, and this prominence is not due to mere dilatation; evidently the venous walls have undergone some kind of hypertrophy. There is no photophobia. The sclerotics are yellow and injected.

The left ear feels "stuffed," but though the heart beats with great force and frequency, she never experiences any species of tinnitus. The neck measures eleven inches above the thyroid, and over the gland thirteen inches. The tumors in the neck can be emptied by pressure. The mouth is always dry, and in the morning "feels like a chip." There is follicular pharyngitis, and associated with it, as we so often see in the other sex, is the hyper-resonant chest of emphysema. She thus has two reasons for complaining, as she does, of a "dry, tickling cough, worse at night." The area of superficial cardiac dulness is much increased, both vertically and laterally. It reaches from the third to the sixth rib. There is a systolic bruit and marked "heaving impulse." The heart beats a hundred and twenty per minute. After animal food, she gets gastralgia, which is relieved by vomiting. Vertical liver dulness=4 in. The bowels act daily, but the stools are pale and clay-like; no diarrhœa. The spleen is natural. The urine contains neither sugar nor albumen. Besides a few scars of old cervical excoriations, the uterus and its appendages are normal in every way, so that the piles, if pelvic in origin, are at present maintained by the portal congestion. The left arm measures six inches in circumference above the elbow; the right arm six and a half inches. The legs are very œdematous; she cannot lift them from the ground, but has to raise them by means of the hands; they measure fifteen inches at the calf; ten at the ankle. The skin, which, with the exception of the head and neck, is generally cold, is prone to itching. She has been subject to severe sweatings since February. She suffers greatly from the heat. With the exception of dreaming and the cough, her nights are good. Pulse, 120; respiration, 25. Temperature 8.30 A. M., 99.8; 8.30 P. M., 100·

Treatment.—I commenced by absolute rest and seclusion; I forbade all alcoholic stimuli, and put the patient on a fish-, egg- and skim-milk diet. Then, having got the liver in good working

order by a week of podophyllin, I allowed an interval to elapse without medication, in order that I might give a thorough trial o the nitrite of amyl acting alone.

I might say that, during this time, the œdema entirely disappeared under systematic firm *massage*, applied three times a day, by a skillful rubber.

On the 14th May, I began the amyl treatment, giving two drops on sugar half an hour before each meal. Improvement was speedy and most satisfactory, so that I find entered in my case-book on the 29th of May: "The throbbing in the head is much diminished: eyeballs much less prominent: the lids now close in sleep; the heart is quieter: there is no cough; the œdema of the legs is gone." Pulse, 108; respiration, 20; temperature 8.30 A. M., 99.4; 8.30 P. M., 99.7.

It will be seen that the pulse had fallen from 120 to 108; the respirations from 25 to 20. The average temperature from 99.9 to 99.5.

The patient felt much subjective relief, but complaining of the severe effect of two-drop doses, I directed one-tenth of a drop only to be taken half an hour before eating. In order that this might be a test case, I have carefully abstained from the use of adjuncts such as chalybeates, &c., and, as far as possible, from all other disturbing elements.

The patient persists in the steady use of the diminished dose, and she writes after three months of this treatment: "I feel quite well in myself, better even than when I returned to India four years ago."

The neck does not decrease in size absolutely; though the patient is putting on flesh so steadily, that it no longer stands out in bold relief.

It may be said that unless the neck goes down, there is no evidence of real improvement from the use of the drug; but I urge that the remarkable subjective relief experienced by the patient is sufficient, had there been no organic improvement whatever, to make the amyl a valuable addition to our very limited therapeutic resources in coping with this interesting though still obscure condition.

From the preceding observations it seems probable, 1. That the affection of the eyes and thyroid has an accidental rather than an essential relationship to Graves' disease.

2. The heart occupies a more prominent pathological position than has hitherto been assigned to it, though it, too, will probably prove to be ancillary to some other element.

3. The pelvic disease has no causative relation to the disease of Basedow.

4. The complaint is emphatically a neurotic one.

Sulpho-Carbolate of Sodium in Scarlatina.—Here and there, scattered through medical journals for the past few years, we have seen records of the value of this preparation in scarlatina. The weight of testimony, and the fact that the text-books say so nearly nothing about the agent, have induced us to present the following cases from the *Transactions of the Maine Medical Association* for 1877, contributed by Dr. Charles Hutchinson, of Portland, Maine:

Dec. 22, 1876, Dr. H. was called to a case of malignant scarlatina, well advanced, having been sick three or four days. He ordered sulpho-carbolate of sodium, five grains every three hours. Spirits nitre and tincture aconite, small doses every three hours, chlorate of potash as a gargle, and to be taken; also cocoa butter, as an inunction, as often as agreeable to the patient, which was every two or three hours. The case went on from bad to worse. The throat was enormously swelled; abscesses formed in both ears, and almost perfect deafness ensued; the discharge from the mouth and nose was very profuse and fetid. He used carbolic acid and chloral hydrate, as a wash, and occasionally applied iodine to the tonsils. Gave milk, beef tea and whiskey as long as his stomach would tolerate them; but in a few days he sank into a state of unconsciousness. The putrid secretions from the throat and nares, more or less, passed into the stomach, vomiting came on, and he rejected nearly everything in the way of nourishment. The sulpho-carbolate was well borne, and was about the only thing retained on the stomach for two or three days. He gave injections of beef tea and brandy, but they were not well retained. There was almost an entire suppression of urine, and the Doctor lost nearly all hope of his recovery. The urine contained no albumen. At last there was a slight change for the better. The discharge from the throat and mouth became less; he was more conscious, and took more nourishment; large abscesses gathered under the ears, which were opened and discharged profusely. He also had a profuse discharge from both ears, and was almost entirely deaf for some weeks. A troublesome cough came on, but yielded in a few days, after taking ammonium carbonate; and he appeared to be getting along very nicely for a week, when Dr. H. was summoned in the night, on account of a profuse hæmorrhage from the throat. The loss of blood had been considerable, and produced great prostration; but it was readily checked by lotions of alum and tincture of iron taken internally. There were subsequent attacks of hæmorrhage, which were controlled by astringents. The patient finally recovered, with but very slight impairment of his hearing.

About ten days after the boy's attack, a little girl, three years

of age, came down with violent symptoms of scarlatina. Dr. H. commenced at once with the sulpho-carbolate of sodium, five grains every three hours, and small doses of aconite and nitric ether, with the chlorate of potash for gargle, and taken quite freely. The fever ran high, eruption came out very abundant, and the secretions from the mouth and nose profuse. He used the cocoa butter freely, which was very grateful to the little sufferer. The case recovered in about two weeks, without any secondary symptoms but otorrhœa, which did not continue long.

January, 7, 1877, another case with all the premonitory symptoms of scarlet fever. The eruption during the afternoon made its appearance, and before the next morning, was thoroughly broken out, almost as red as a lobster. Fever ran very high, intense heat of skin, great thirst, constant tossing about and calling for water. Dr. H. put him on the same treatment as the preceding case; allowed him ice and lemonade. The disease made rapid progress. In about thirty-six hours he went into convulsions. Bromide potassium and chloral hydrate relieved the nervous symptoms and procured rest. The sulpho-carbolate was continued, bromide and chloral ordered whenever any symptoms of convulsions came on. The tonsils were very much swollen, and the discharge from the mouth and nares profuse, but he ran along through the congestive stage without any more convulsions, and for two weeks appeared to be getting along finely. His appetite returned for a few days, but there was some indiscretion in regard to his diet on the part of the attendants; his stomach gave out; his appetite left him. In spite of stimulants and tonics, he grew weak. Secretion of the kidneys very scanty, but did not contain any albumen. He became very restless, and his case looked very unpromising. I so expressed it to the family. A quack was called in and took charge of the case. He lingered about two weeks longer and died.

January 22d, Dr. H. was summoned to another case, in a very healthy locality, where all the surroundings would seem to be conducive to health, just coming down with scarlatina. There were two other children in the family, neither of whom were known to have had scarlet fever. Dr. H. thought this a favorable opportunity to try the prophylactic power of the sulpho-carbolate of sodium. He gave it to the patient as in the preceding cases, and gave it to the others three times a day. One broke out with scarlatina in about ten days after the first was taken, but it was a very mild type. The eruption only continued about three days; tonsils were somewhat enlarged, but soon yielded, and the case recovered without any secondary symptoms. The little boy had a thorough run of the disease, but no serious com-

plications occurred; he got through with the severity of the disease in about two weeks, and went on to final recovery. The other child escaped the disease entirely.

Not long after this, Dr. H. was called into another family to a little girl about seven years of age; she was well broken out with scarlatina. There were three other children in the family, who had never had scarlatina. The Doctor treated this as the preceding cases. In two weeks the patient was convalescent. He gave the others the sulpho-carbolate, five to ten grains, according to age, three times a day. Not one of them had any symptom of scarlatina.

Dr. H. has used this remedy in diphtheria, with very satisfactory results; it seemed to modify the severity of the disease and diminish the fetid odor. He thinks its antiseptic properties will be a remedy of great value in this disease.

Dr. H. used it in every case of scarlatina, and is satisfied it is a remedy of great value. He has examined the urine in nearly every case, and has not found albumen in a single one. He has had but one fatal case of scarlatina since he commenced the use of this remedy, and that one passed into the hands of a quack some ten days before its death. Dr. H. has never seen any unpleasant symptoms arising from its use. It is almost tasteless, and is readily taken in cold water, often without the patient knowing it. It is entirely unnecessary to prepare an elixir. The medicine should be given in solution, freshly prepared, as wanted for use.

"I am fully aware that prophylactics are to be received with due caution. It will take a large number of cases, careful investigation, and statistics for a long time, to ascertain their real value. Its well known antiseptic properties should go far to recommend it as a prophylactic. Dr. Brackenridge states (in *Braithwaite's Retrospect*, Jan., 1876,) that the results which he has actually obtained have exceeded his utmost anticipations."

Amyl-Nitrite in Pertussis.—The very interesting paper by Dr. George Bayles, of New York city, in our August No, has attracted a good deal of attention. As experience bearing on the subject will prove valuable, we extract the following from a private letter, dated September 7th, from Dr. Walter A. Newman, of Liberty Mills, Va.: "In a very few days after reading the article, I was afforded an opportunity of trying the agent, and with all the success vouched for on the part of the author—relieving the paroxysms and diminishing their frequency. As to the *cure*, I cannot say. Instead of quinine, I am using cinchonidia, which seems to answer the purpose."

Stenosis of the Larynx, resulting from syphilitic cicatrices or from the swollen condition of the walls of that organ, frequently persists—although an operation has been resorted to—and will not yield.

How can we remedy this evil? To accomplish this object, Professor Schroetter has constructed a set of zinc cylinders, $1\frac{3}{4}$ inches long and of enlarging diameter from $\frac{1}{4}$ to $\frac{3}{4}$ of an inch. Through these cylinders pass a small brass rod, projecting at both ends about one-fourth of an inch, ending at the lower extremities in buttons, and having at the upper end eyes, through which threads from 18 to 20 inches long are drawn. To introduce the bougie into the cavity of the larynx, the thread, by means of a hook-shaped mandrin, is drawn through a canula, with handle attachment. The cylinder, having a circular depression at its upper end, fits closely over the canula. The cord is now drawn tight and wound firmly around at the end of the handle, the bougie and canula have become one—forming one instrument 14 inches in length. The cylinder is now oiled, and, with the aid of the laryngoscope, it is introduced into the larynx, and when properly adjusted the button above mentioned protrudes at the external opening; it is grasped by a pair of pincers; these are fastened by a screw, and the cylinder is firmly fixed and cannot be moved up or down. The cord is now loosened at the handled and the canula withdrawn, leaving the cylinder in the larynx. The cord protrudes through the mouth of the patient, without incommoding him whatever in mastication or deglutition. Every twenty-four hours the bougie is withdrawn and again introduced, gradually increasing the size. The modus operandi is here the same—the bougie, by its weight and constant contact, dilating the constricted portion.

This very excellent and most ingenious procedure was first employed in the Vienna Throat Clinic of 1874–5, with most happy results. Its value entitles it to a prominent place in the history of laryngoscopy. (Dr. Bernard Tauber, of Cincinnati, in the *Transactions of the Ohio State Medical Society*, 1876.)

A New Treatment in Post-Partum Hæmorrhage.—Dr. W. Handsel Griffiths, in the *Practitioner*, reports two cases of severe post-partum hæmorrhage, in which every known means had been adopted unavailingly, and to which he was called in consultation. He says: "It flashed across my mind, in the first case, to try the effect of the ether-spray, and accordingly I directed a large spray over the abdominal walls, along the spine, and over the genitals; the uterus at once responded, and the cessation of the hæmorrhage was almost immediate. In the second case I lost

no time in adopting a similar treatment, and with an equally successful result. I have consulted several eminent obstetric practitioners in Dublin, and am informed by them that they are not aware that this treatment has been heretofore proposed. The advantages of the ether-spray over the application of cold water, and the other means usually adopted in these cases, must be patent to every practitioner of midwifery."—(*The American Practitioner.*)

A New Adhesive Plaster, Especially Adapted to the Requirements of Modern Surgery.—Dr. Henry A. Martin (*Boston Med. and Surg. Jour.*, October 11th, 1877) announces a useful invention, should his experience be confirmed. The compound of which this plaster is made is of the very best Para rubber, Burgundy pitch, and balsam of tolu. The latter ingredient, besides contributing an agreeable fragrance, has an important effect in rendering the plaster unirritating to the skin, and improving it in other respects. These are the essential ingredients; they are combined and spread on a very strongly woven cloth (which has been thoroughly "shrunk," and deprived of every trace of "dressing" by treatment with the eminently antiseptic liq. zinci chloridi, of Bennett) by means of extremely expensive and exquisitely adjusted machinery, contrived for different and very important manufacturing purposes, but perfectly adapted to this new production. This plaster has been found to be all that can be desired in all cases, and of very especial value for purposes of extension in fractures, etc., in wounds of the scalp, and bearded and hairy parts of the body, and in those cases in which muscular action and gravitation tend to a separation of the sides of wounds; for strapping for ulcers, the breast and testicle; for attaching and fixing splints, and in treating fractured patella by Sanborn's method. It has been tested in an atmosphere below zero, and found perfectly and readily adhesive, while in one at 100° it has been not more so. Specimens made a year ago evince no signs of change or deterioration, and those of a similar product, made more than ten years since, retain adhesive and other qualities.

Dr. M. has transferred the entire commercial charge of this invention and manufacture to Messrs. T. Metcalf & Co., of Boston, and has requested them to present a specimen of the plaster to any physician who may apply, either personally or by letter, that a full examination and testing may be made inexpensively by all who desire. If any should use the plaster, he wishes them to give their opinion of it, if favorable, and still more if, for good reason, it is unfavorable. Dr. M. has conscientiously endeavored

to test it fully before troubling the profession with this announcement; but defects may be revealed by time, or to other observers, and he is extremely anxious to be made aware, and to make others aware, of such possible defects as soon as they may be discovered.

Sudden Death in Rheumatism under Treatment by Salicylic Acid.—We translate from the *Gazette Hebdomadaire* of August 3d, the following report of a case furnished to the *Bulletin de Therapeutique*, by M. Empis:

The patient had suffered for six days with acute articular rheumatism without cardiac complication, for which all the ordinary remedies had been employed without success. On June 27, salicylic acid was prescribed in the dose of seven grammes in ten powders—one powder (about ten grains) every two hours. The effect was truly marvellous. After the fifth dose, the pains abated, and the patient began to move without suffering. Next day his condition was very satisfactory. The joints were not painful, and he could move them easily. He complained only of deafness and incessant ringing in the ears. The fever had subsided, but there was a copious perspiration, and he felt much enfeebled. A very slight systolic murmur was observed in the region of the heart. He was ordered five grammes salicylic acid in ten powders, one every two hours, as before. On the morning of the next day (29th), M. Empis found his patient so well that he suspended all treatment, and advised him to take some food. The benefit derived from the salicylic acid, which appeared so marvellous, was unfortunately of short duration. Towards four o'clock next morning, and after a restless night, he asked for food, his stomach, as he said, feeling empty. He sat up in bed, and took a dish of tapioca with beef tea. Scarcely had he finished his meal, when he complained of a violent pain in the region of the stomach, and immediately afterwards fell back on his pillow, deprived of consciousness. His limbs were agitated convulsively for several seconds as in eclampsia. Respiration became stertorous, with intervals more and more prolonged, and finally the heart ceased to beat. He was dead.

M. Empis does not positively charge the salicylic acid as being the direct cause of this sudden death, but he asks if one can with impunity arrest on the spot the articular manifestations of acute rheumatism in the stage of its increase, without the risk of localizing elsewhere the effects of an affection so profoundly constitutional?

A number of such reports as the above, which we copy from the *Pacific Medical and Surgical Journal*, October, 1877, should serve as cautions in the administration of salicylic acid. Recently

we have been combining tincture of digitalis with the acid, in stimulant doses, but do not know that it does any good, for we have never seen any case in which the action of salicylic acid seemed to threaten danger.

Epidemic Dysentery Treated by Iodine.—Dr. J. C. Hall, of McKinneyville, Miss., gives his experience with iodine in this class of cases (*Transactions of the Mississippi State Medical Association*, 1877): Such mild cases as may be relieved by a full dose of castor oil and oil of turpentine, or a full dose of ipecacuanha, rest in bed, proper alimentation, conjoined with proper hygienic regulations, constitute no part of the catalogue of cases now under consideration. It is to that fatal form of dysentery, peculiar to warm climates and moist, malarial regions, accompanied with great bodily heat, corded pulse, high fever, tenderness in the region of the sigmoid flexure of the colon, and along the descending and transverse portions of this part of the intestinal tract, accompanied with frequent discharges of mucus, or blood and mucus, great tenesmus, etc., to which he invites attention.

Dr. L. G. Capers recommends tincture of iodine, tincture of camphor, and tincture of opium in the treatment of this form of dysentery, to whom Dr. H. is indebted for the idea that iodine will relieve patients suffering from this form of dysentery. He has employed the remedy in such large doses as 20 or 30 drops, minus the camphor and opium—dissolved in sweetened water, repeated every two or three hours until all dysenteric symptoms disappeared. In order to prevent precipitation of the iodine upon the mucous coats of the stomach, he has combined a small quantity of aqueous solution of iodide of potassium, and prohibited starchy articles of diet during the administration of the iodine.

The first evidence of improvement is evinced by deodorization of the stools. It is necessary to bear in mind that forty-eight, sixty, or even seventy-two hours often elapse before the dysenteric discharges give way, and are replaced by watery actions, after the iodine treatment is instituted. The more aggravated symptoms now give way; the sanguinolent discharges give place to the watery actions just described; the intestinal tenderness, high temperature and circulatory excitement are replaced by ameliorated symptoms, better appetite and more quiet.

Large doses of bismuth subnitrate—in teaspoonful doses frequently repeated, so as to fill the bowels—conjoined with morphia hypodermically administered, to relieve pain and insure quietude, complete the treatment, so far as we are concerned.

The dangerous period having now been bridged over, little or no difficulty will be encountered in conducting the patient through the ensuing convalescence, whether it be short and easy, or long and tedious.

The Value of the Styptic Compress.—In the *Transactions of the Mississippi State Medical Society*, 1877, M. S. Craft, M. D., of Jackson, gives prominent importance to the styptic compress for controlling arterial hæmorrhage when ligation is difficult.

In 1868, I was consulted by a gentleman with regard to a wound of the foot, received during the war, and made by a minnie ball. The foot was despaired of, and I was applied to, supposing that I would amputate it. He moved about with great difficulty, having to use two crutches and a sling for the injured foot. The leg and thigh were shrunken, and drawn up; the foot itself was greatly enlarged. The middle metatarsal and adjoining tarsal bones were extensively carious; fragments of bone had often escaped, and unhealthy, offensive matter was being constantly discharged from a number of openings. The general health had suffered greatly. Removal of the dead bone was resolved upon instead of amputation. Dr. J. L. Carter put him under chloroform, first fortifying him well with brandy. I made incisions guided by the openings, so as to reach all the diseased bone, and with chisel and gouge carefully removed it; after cleansing the wound with water, I detected a portion of the metatarsal bone at the bottom of the wound, which I thought diseased, and with a delicate chisel, proceeded to remove it; but I struck the chisel a little too hard, and went through the piece of bone into the tissues beneath. Immediately there was a jet of arterial blood, not large, but sufficient to soon fill the wound. I had wounded the plantar arch, but by keeping the wound open, admitting the air, and applying cold water, I soon checked it. I remained with the case until there was good reaction. With the brother in charge, I left. Forty-eight hours passed and no bleeding. I commenced feeding on rich food, an occasional toddy, and had promises of a good foot. During the following night the bleeding commenced in my patient's foot, and was furious. I found the poor fellow blanched and terribly frightened—everything was bloody. He was in no condition for an operation; in fact, nearly pulseless, and he protested, with what strength he had left, against being cut again; he would hardly let me remove the dressings, or examine the wound; but I did remove the dressings, and, with one finger deep in the wound, pressed upon the bleeding point. As I had no medical assistance, and it was late at night, I concluded to fill the wound with

lint, saturated with a strong solution of ferric alum, and this I did, packing it, in every part, well, until it was filled; put a wet compress over the lint, and confined the whole with a bandage; elevated the foot, and kept the head low. I watched the case for hours, while he slept; reaction came slowly; at last, thinking him doing well, I left for a short while. Upon my return, with Dr. Carter, we found no hæmorrhage, and the patient doing as well as could have been expected; ordered him to be kept absolutely still; to be well nourished and stimulated. I visited the case constantly, and watched it most anxiously—knowing that another hæmorrhage would probably be fatal. When, after some days, pus was noticed on the dressings, I cautiously removed the bandage, and sponged about the wound, but disturbed nothing else—determined to use no violence in removing the compress. In his anæmic condition, it would take the clot longer to form, and longer to become organized; forcibly removing the lint might break it up; so I let it remain until loosened and forced out by the healing process underneath. The last of the lint, that which probably compressed the artery, did not escape for many days, and then it was floated out by the water used in cleansing the wound. The young man was well enough to leave, in about four weeks; and made a most satisfactory recovery.

2D *Case*, I saw, in consultation with Dr. P. T. Bayley, of Jackson. A little boy, nine years old, stepped upon a broken vial, inflicting a wound upon the sole of the foot, that was followed by profuse arterial hemorrhage. He was attended by a very skillful surgeon about three weeks. The father of the boy informed me that the hemorrhages occurred every twenty-four or forty-eight hours. The little fellow was, of course, from this constant depletion, greatly weakened and reduced in flesh. The father at last concluded to bring him on the cars to his former family physician, Dr. Bayley, of Jackson, who saw him first Sept. 27th, 1876. A hemorrhage occurred two days after the boy's arrival, which Dr. B. checked by a compress and bandage. I was requested to see him the day following. I found him very pallid and very feeble, but there had been no return of hemorrhage since the Doctor dressed it; so we left the foot undisturbed. On the morning of October 1st bleeding commenced again. We went out hurriedly three miles in the county, and found that the bleeding had been very profuse and exhausting, but had ceased; the boy was pallid and nearly lifeless. I removed the bandage and compress at once; found the foot enlarged and waxy in appearance, the wound very unhealthy and offensive, and filled with an old blood clot. We explored the wound to the bottom, turning out everything with the finger, and thoroughly cleansing

with water. There was no hemorrhage for some time, but ultimately I noticed it coming from an oblique excavation or pocket at the bottom of the wound, the bleeding vessel itself out of sight and not within reach of tenaculum or forceps. To tie it, necessitated making a large wound in tissues which were much swollen and already disposed to slough, additional blood would be lost, and he had not a drop to spare. Chloroform, too, was out of the question in his depressed condition. We thought best, therefore, to plug the wound. As the wound was offensive, we disinfected it with Labarraque's solution, and as a healthful stimulus to the tissues, applied the nitric acid lotion very strong. The material for the plug or compress was raw cotton, saturated with liquid persulphate of iron, diluted with water, about 2 drachms to the ounce. Holding my finger in the pouch from which the blood came, I pushed piece after piece of this styptic cotton into it, and pressed it hard upon the bleeding vessel and around it, until the pouch was not only full, but distended with it; and so with the entire cavity packed hard and filled to distension throughout, until it was above the surface. Upon this I put a compress of wet cloth, and confined the whole with a narrow strip of bandage. The entire foot was not bandaged. We wanted the wound left so that the first drop of blood that escaped should be seen by the nurse, and directed her if blood did appear, to press with the finger upon a certain spot over the posterior tibial artery, indicated by a small piece of adhesive plaster. The foot was elevated upon pillows, and ordered not to be moved under any circumstances; the head put low; plenty of milk and other rich liquids, toddies, were ordered at regular and short intervals, and muriated tincture of iron, twenty drops every three hours. Saw him every day, but did not disturb the dressings until the fourth, and then simply removed the strip. Everything dry, no discharge of any kind; no smell. Replaced bandage and did not remove it again until suppuration was noticed; pus creamy. In the meantime, there had been a most astonishing improvement in the general condition of our patient; he was gaining flesh and strength rapidly. At our next visit, removed compress, but left styptic cotton *in situ*, and this latter we did not remove at subsequent visits, except as loosened and forced out by the granulations. The result was all that could have been desired—a perfect recovery from one dressing.

Mr. Atkinson, while attending his gin, had his right hand caught in the saws, and considerable damage done the palmar surface. Profuse hemorrhage resulted at once, and continued to recur for many days, notwithstanding the dressings and attentions of Dr. Dulaney. I was requested to see him, with the

Doctor. I found a very strong, vigorous man depleted to extreme weakness; he was haggard and anxious—very fearful that another hemorrhage would finish him. I removed the dressings at once, and found an offensive sloughing wound of the palm of the hand, extending to the wrist, and, though bleeding freely, I could control it easily—by compresion at certain points in the wound. First, disinfected it, then used nitric acid lotion, strong, to stimulate the tissues and prevent sloughing, and then the styptic lint was pushed down into the wound, and packed against the bleeding points—the whole confined with compress and bandage, as before described. The hand was elevated on pillows, and perfect quiet and rest enjoined. I left with the injunction that the dressings should not be disturbed until free suppuration was established, and that the styptic lint should remain until washed away with the discharges. When I saw him again, he was well.

I report these cases, gentlemen, because of the trouble and anxiety they gave me, and because of the unexpected success attending the treatment. If you should meet with cases like them, and find that it is too late to cut down upon the bleeding vessels, and tie in the wound, let me recommend the styptic compress. If well applied, I think, it will not disappoint you.

Endemic Origin of Cholera.—We have time and again insisted that epidemics of true cholera may originate in this country, and expressed our reasons for this belief. Dr. George B. Wood himself, in his well known work on the *Practice of Medicine*, maintains that it seems to be a disease of the Mississippi Valley, although believing the germs of the disease were originally of European importation. We have many times seen cases of sporadic cholera, with the distinctive diagnostic features, showing its difference from the so-called "Asiatic cholera." But in addition, we have seen in this city at least two cases that, according to all tests that books tell us to apply, were indigenous cases, if we may so use the term, of *true* cholera—the only clinical difference being that there was in neither instance any history of personal exposure to an epidemic influence, or to a contagious principle.

We find some confirmation of our views on this subject in the very interesting *Notes on the Epidemiology of Ohio*, by Dr. Thomas C. Minor, of Cincinnati, reprinted from the *Lancet and Observer*. He remarks: "The American cholera epidemic of 1873, *which was not imported from Europe*, also prevailed in this State [Ohio]. * * * It is well known that a medical 'Commission' by the United States Government was appointed to inquire into the cause of the epidemic of 1873. That the

report made by the 'Commission' was elaborate, there can be no doubt, but that the *conclusions* drawn by the same 'Commission' were wholly unwarranted and unsupported by any facts adduced from the mass of material placed at their disposal, is also a fact not to be successfully controverted. Notwithstanding the protests made by health officers in the South, Southwest and West, the epidemic of 1873 was proclaimed to be an *imported* one, and an official endorsement of this position was given by the United States Government. Later, an English writer in the *Medico-Chirurgical Review*, proved conclusively that the ships in which the cholera germs of 1873 were said to have been imported, sailed from Europe several months before the cholera made its appearance at the ports of departure. Only a short time since, Dr. Max van Pettenkofer, of Munich, Bavaria, in an elaborate review of the subject, completely refuted the claims of the American Cholera Commission. Discussing the nine propositions made by the 'Commission,' Pettenkofer observes: 'In the whole report nothing having even the appearance of a proof of the nine propositions can be discovered.' Dr. White, of New Orleans, Dr. J. J. Quinn, of Cincinnati, and numerous other observers in the Mississippi Valley, who protested against the *importation* theory can now rest satisfied that their better judgment has been fully vindicated."

Chenopodium Anthelminticum for Anasarca.—Dr. Samuel R. Burroughs, of Houston, Texas, in a report on the "Indigenous Medical Resources of Texas," published in the *Transactions of the Texas State Medical Association*, 1877, makes the following foot note on page 108: "The chenopodium anthelminticum root, split or cut to pieces, and put into an ordinary bottle filled with vinegar, to which has been added two or three drachms of carbonate of iron, will relieve anasarca when a sequel to scarlatina, or when dependent on any functional derangement."

Incidentally Dr. B. remarks that a decoction of this plant, (which is abundant in Texas, and commonly known as Jerusalem oak, wormseed, etc.), together with the cooked plant, mixed with meal, is said to be also a good remedy for chicken cholera.

Iodoform.—A correspondent to the *Medical Brief*, October, states that tannin deodorizes iodoform. He uses equal parts of each as an application to chancroids and old ulcers.

The Clinic, October 13th, quotes from an exchange the following use of iodoform in orchitis: "An ointment is used containing thirty grammes of lard to two to four grammes of iodoform, according to the intensity of the inflammation." It calms the pain, acts as a resolvent, and shortens the duration of the disease.—*Proceedings Med. Soc. County of Kings, Nov.*, 1877.

Systematic Prevention of After-Pains.—Dr. W. Allan Jamieson, F. R. C. P., Edin., has a very interesting article on this subject in the October number, 1877, of the *Practitioner*. He says:

Since the method advocated by Crede, of squeezing out the after-birth by external pressure, has been generally adopted, there can be no objection to the employment of any safe and efficient mode of keeping the wound firmly contracted. Much may be done in this way by firm pressure by means of the hand of the accoucheur himself, and I am aware that it is the practice of distinguished obstetricians to administer a dose of some preparation of ergot by the mouth towards the close of labor. But the hand tires, and when anæsthetics are given, swallowing is impossible. In the solution of ergotin, introduced by Professor A. Simpson, we possess an agent available in every case; it is at once perfectly reliable, keeps well, and requires no preparation, while, if injected deeply over the gluteus, nothing unpleasant results from its use save, in some cases, slight pain for a short time. I have now employed it in the sixteen last cases of midwifery I have attended, with the happiest results as regards the prevention of after-pains. Three at least were marked instances of its value.

Mrs. J., aged 35, had a natural though very tedious labor with her sixth child. Chloroform was administered during the last two hours. After the child had been expelled, and before the cord had been tied, ten minims of Dr. Simpson's solution of ergotin (ergotin ℥ss, distilled water ℥iss, chloral hydrate gr. v) were injected deep into the buttock. After removal of the child, the placenta was expelled by Crede's method, and the uterus caused once for all to contract firmly, so as thoroughly to expel all clots; then the binder without pads was applied. It was half an hour before Mrs. J. awoke to full consciousness, and she never had an after-pain to speak of, though in all her previous labors she had suffered for several days severely. During the hour or so I remained with her, or in the house, after the completion of the labor, I examined as to the state of the uterus, and found it always hard and unyielding.

Mrs. L., aged 35, was also confined of her sixth child, after a rapid labor. No anæsthetic was given, but the same course was pursued in the management of the third stage as in Mrs. J.'s case. The after-pains had been most severe and long-continued in her previous confinement. On my visit next day, my patient assured me, with a smiling countenance, that she had not had anything worth calling a pain since the last labor pain itself—not even when suckling. This last fact is specially interesting,

as even in those in whom after-pains at other times are slight, the act of nursing usually evokes them.

The third case was almost similar, save that it was an abortion at the fifth month; in it there was neither after-pain nor much lochial discharge. All the sixteen cases made quick and uninterrupted recoveries.

In using ergotin in this way, there is one point to be attended to, arising out of the mode of action of ergot on the uterus. Although ergotin injected subcutaneously produces the physiological effect of the drug in the most rapid manner at present attainable, still it must be remembered that ergot acts gradually; its full influence is not manifested all at once. It will not do merely to inject ergotin and trust *to its unaided action from the first.* We must be fully assured that the uterus is contracted before we leave it to nature and ergotin.

[The Editor for some years past, adopting the practice of Dr. Goodall, of Philadelphia, has been in the habit of using one to two grains of quinia sulphate every two to four or six hours. He rarely meets now with cases of after-pains that attract attention.]

Of the value of carbolic acid injections, I can speak with the greatest confidence, for I have used them in any case where there was cause for anxiety, with the result that, out of 630 consecutive labors which I have attended during the last seven years, not one patient has died within two months of her confinement.

[For about a year past, the Editor has been using salicylic acid in preference to carbolic acid. The equal of carbolic acid as a disinfectant and deodorizer, a solution of salicylic acid has no perceptible or unpleasant odor of its own.—Ed.]

Diseases of the Nose.—Dr. Adolph Alt, of Toronto, gives a very good report on Otology in the *Canadian Journal of Medical Sciences*, Nov., 1877, from which we make the following extracts:

(*a*) *Acute Catarrhal Rhinitis.*—The most frequent among the nasal diseases is the acute catarrhal rhinitis. It is commonly caused by taking cold; sometimes by inhalation of irritating vapors, the internal use of iodide of potassium, etc. The symptoms are: swelling of the mucous membrane, an abnormal secretion, loss of the sense of smelling (sometimes tasting), and in some persons fever. The secretion from the mucous membrane, first serous, becomes later on mucoid, and finally, more or less muco-purulent.

The swelling of the mucous membrane varies in degree, but mostly it is such as to produce entire stenosis of the nose. This

swelling is probably due to the erectile bodies which lie between the periosteum and the mucous membrane of the conchæ (first described by Kohnrausch). By inspection we see that especially the conchæ are greatly swollen, their mucous membrane is œdematous and very red. The same picture is obtained by the rhinoscopic examination.

The disease lasts from one to two weeks, and generally ceases without medical aid. Sometimes, however, it goes on into a chronic state. In these latter cases it is often very useful to inject a solution of nitrate of silver with the posterior nares syringe into the choanæ. Another mode of treatment is to blow a powder of nitrate of silver and talcum (1-3:20) into the nose, either through the anterior or posterior nares (the latter is preferable). Sometimes the patients suffer from sneezing fits. These are commonly checked by morphine, which is best administered in the shape of a snuffing powder.

The disease may spread over the adjoining mucous membranes, especially the lachrymal duct, conjunctiva, Eustachian tube, pharynx, larynx, etc. If it is accompanied by much and severe headache, we presume that the catarrh has spread to the frontal cavities.

(*b*) *Acute Blennorrhœic Rhinitis.*—This form of nasal disease is comparatively rare. It is either caused by direct inoculation of blennorrhœic secretion of other organs upon the mucous membrane of the nose, or by traumatism, or it develops from a simple catarrhal rhinitis. The examination by inspection and by rhinoscopy reveals a higher degree of swelling of the mucous membrane than in acute catarrhal rhinitis. The main characteristic symptom is, however, only the blennorrhœic secretion. Like all purulent inflammations it leads frequently to superficial ulcerations, and can be propagated upon the mucous membrane of the parts surrounding the nose. The blennorrhœic rhinitis lasts always several weeks, even months. In very severe cases, especially in children, it may lead to death by causing affections of the brain. The ulcers sometimes produce caries of the bone and cartilage. The worst cases are generally produced by infection with gonorrhœic secretions.

The best remedy for this disease (besides cold applications and leeches in the earliest stage) is nitrate of silver in a five-grain solution, applied by the posterior nares syringe. Great care should be taken to cleanse first the nasal passages from all crusts and pus, which is best done by the posterior nares syringe or a common Davis syringe. Also is it well not to inject more than two or three drops of the solution. Tannin, alum, etc., do not yield as good results as the nitrate of silver.

(*c*) *Chronic Purulent Rhinitis—Ozæna.*—The chronic purulent rhinitis develops from an acute catarrhal—more frequently from an acute blennorrhœic rhinitis. It occurs, however, chiefly in scrofulous or syphilitic individuals. The first stage of the disease is that of hypertrophy of the mucous membrane. The latter is immensely swollen and bluish red. If the disease is allowed to run its course, it leads to atrophy of the mucous membrane. We find it then very thin and pale and its epithelial cells dim, so as to give it a dull appearance. Only few cases of chronic rhinitis show a profuse secretion; in most of them the secretion is very sticky and apt to get dry. The dried secretions then form crusts on the surface of the mucous membrane which often are very large. The secretion is mainly a purulent one, but we find besides around the cells a great number of dead and thrown-off epithelial cells in it. The crusts have a very characteristic greenish appearance; sometimes we find red spots in them, remains of small extravasations. They adhere more or less firmly to the mucous membrane. These crusts, when remaining in the nasal cavities, very soon decay, and thus produce a foul smell, known as ozœna. This symptom is frequently what brings the patient to the physician, and this is usually very late. The disease is very apt to spread over the neighboring cavities. A stinging pain in the cheek and forehead commonly announce these complications. The hyperplasia of the mucous membranes often leads to papillomatous new formations. As in the acute blennorrhœic rhinitis, we find not unfrevuently ulcerations, which sometimes produce caries. A most common complication is that the external skin of the nose swells, becomes infiltrated and excoriated. This disease is a very tedious one, but if treated with the necessary patience, can mostly be cured. Only in cases in which the mucous membrane is totally atrophied and the sense of smell lost, the prognosis is a very bad one.

The treatment consists in removing the fluid and dry secretions and reducing the mucous membrane to its normal state. The first is done by carefully syringing the nose with lukewarm water, in which we may dissolve some chlorate of potash (one teaspoonful to a pint of water). This has to be done two or three times a day, and to be continued until the nasal passages get free. It is best to use again Davis' syringe in the way above described. If the disease originated on a specific base, we must, of course, at the same time treat the patient accordingly. After the nasal passages have been carefully cleaned, the application of a five or ten-grain solution of nitrate of silver with the posterior nares syringe is of great benefit; sometimes its administration in the shape of a powder may be preferable. If all the

secretion is removed, the ozœna will cease. The hypertrophic parts of the mucous membrane (especially occupying the conchæ) may be treated by the application of nitrate of silver in substance, or be removed by galvano-cautery—which latter causes comparatively little pain.

(*d*) *Epistaxis* (*Hæmorrhage*).—Hæmorrhage from the nose is of comparatively frequent occurrence. Its ætiological relations are so manifold that it would take too much space to consider them in this paper. In most of the cases the hæmorrhage ceases without medical interference by coagulation. Where this does not take place readily, we may first apply external compression. If we do not stop the bleeeding that way, we may fill the anterior nares with picked lint. In using these two methods, we have to watch carefully whether the blood does not run down into the pharynx. If it does, we may resort to cold or astringent injections (alum, tannin, zincum sulfuricum, etc.). The only remedy, however, which will surely lead to a satisfactory result is the stopping up of the posterior and anterior nares at the same time. For the stopping up of the posterior nares, Belloc's tube, and if this is wanting, an elastic catheter may be used with great success.

Antiseptic Surgery.—*Lister's System is not the Application of Peculiar Dressings or the use of Particular Antiseptics.*—It is a method of treating wounds based on the "germ theory," and its principal aim is to prevent the entrance of germs into wounds, to destroy them if already there, and to guard against the accumulation of wound secretions. In order to attain this end, he surrounds the patient with a series of precautionary measures, which have from time to time been improved on by him. These require peculiar materials and appliances, of which I present the latest phase that came under my observation. They are enumerated without particular plan. Where the mode of preparation is not indicated, it will suggest itself; where it is described, it is adapted as much as possible to self-preparation, thereby facilitating the introduction of the system by diminishing its greatest objection—the cost. Their use is described as concisely as possible, and will become clearer when I shall treat of the mode of operating and dressing.

1. *Carbolized Solution* (Acid. carbol. cryst. 5, aq. 105) is used to clean the neighborhood of wounds before operation, to disinfect the hands of surgeon and assistants, and instruments, to wash out septic wounds and clear drainage tubes.

2. *Carbolized Water*, a $2\frac{1}{2}$ per cent. solution of crystalized

carbolic acid in water. It is used in the spray and to wet the "lost gauze."

3. *Carbolized Oil* (Acid. carbol. cryst. 5, ol. oliv. 100), to oil catheters or other instruments, or fingers when about to be introduced into some of the cavities. It is also employed when a constant direct contact of the antiseptic with the wound is necessary, as in caries, or where the gauze dressing cannot be applied, as in abscess of the rectum.

4. *Solution of Chloride of Zinc* (8 per cent.), 1 part of liq. zinc. chlor. mixed with 3 parts of water. Where wounds have been exposed unprotected to the access of atmospheric air, or where, from mistake in dressing, aseptic wounds have become septic, they are swabbed out with this solution. It is more effective than carbolic solution, but too powerful for permanent use in the dressings.

5. *The Spray.*—In order to prevent the entrance of living germs, during an operation or dressing, a spray of "carbolized water" is directed on the wound. The best instrument for this purpose is "Lister's spray," a steam atomizer which throws a large cone of finely divided spray. It is almost indispensable in long operations, and where a considerable space of tissue is exposed. In its absence, it may be replaced by the ordinary steam atomizer, of which two ought to be at hand, as they are sooner exhausted. Their suction tube is unnecessary, and a glass tube, drawn to a fine point, and bent at an acute angle, to throw the steam against wounds without necessity of tipping the instrument, may take its place. In the absence of these, or for short dressings, Richardson's spray apparatus may be used. It has, however, serious defects; it gives out frequently without apparent cause, is very fatiguing, and wets the wounds too much, as the spray is not as finely divided as that of the steam atomizer.

6. *The Protective* is oiled silk, coated with copal varnish, to render it impermeable, and then covered with a thin layer of 1 part dextrine, 2 parts starch, and 16 parts "carbolized solution," to facilitate adhesion of the disinfecting fluids, into which it is dipped before being applied to the wound. The purpose of the "protective" is to prevent the irritating effect of the contact of the antiseptic with the wound. It is placed immediately over this, overlapping it but little.

7. *The Antiseptic Gauze*, a peculiar unstarched cotton gauze, selected by Mr. Lister on account of the facility with which secretions penetrate its meshes. It is prepared with antiseptics, and thus, after absorbing the wound fluids, it prevents their decomposition. Pieces of cotton gauze, six yards in length and one yard in width are to be placed in a zinc trough and heated

in the water bath for several hours, after which they are spread out, and a hot mixture of 1 part cryst. carbolic acid, 5 common resin and 7 paraffine is poured over them by means of a syringe. They are then returned to the trough and submitted to pressure for some hours to cause an even distribution of the fluids. The resin is to hold the carbolic acid more firmly, and prevent it from being washed out or evaporated too quickly. The paraffine diminishes adhesion of the dressing. This gauze is prepared in factories in Germany, the best known being the "International" factory, at Schaffhausen, Switzerland. Its great cost (20 cents a yard in the factory) is a considerable drawback. I have, therefore, tried to replace it by cheaper material, and to prepare it myself, and have successfully used old mosquito netting for this purpose. As this is really the only part of Lister's dressings for which the Army Supply Table does not furnish the materials, it may be of interest to learn how it is done. Old mosquito bars, which have become useless for their legitimate purpose, are steeped, or, perhaps better, boiled in lye, to remove all dirt and render them more hygroscopic. They are then immersed in the hot resin mixture, which may be heated in a tin bucket on the stove. To remove the surplus liquid, they are passed through a clothes-wringer, allowed to cool, stretched into shape, and put away in a closed vessel or wrapped in oiled muslin. The clothes wringer is easily cleaned with boiling water and a cloth. I have used this antiseptic netting with the same results as the imported gauze.

The gauze is used wet with carbolized water in immediate contact with the "protective," folded in about six thicknesses and overlapping the "protective" several inches. The remainder of the gauze is applied dry. Lister considers eight layers, *largely overlapping* the wound, sufficient. Between the seventh and eighth layers he inserts the "McIntosh."

8. *The McIntosh*, common rubber cloth, is used to keep the secretions of the wound from finding their way immediately to the surface, and to compel them to permeate the whole dressing, thus being constantly in contact with the carbolic acid. It is cut an inch smaller than the gauze, that the secretions, when about to appear externally, may be discovered, while yet lying in antiseptic material. The "McIntosh" need not be renewed with the dressing, but may be washed off with carbolized water and used again

9. *Catgut.* is the *sine qua non* of Lister's dressing for ligatures and deep sutures. In a few days it is absorbed, and the wounds close over it without danger of its acting as an irritant or permitting hæmorrhage. In order to prevent its becoming soft,

spongy and slippery, it has to go through a process by which it is rendered tough, flexible and able to resist the action of the wound secretions for a sufficient length of time. It is first shaken up in a carbolized emulsion of 1 part cryst. carbolic acid (dissolved by the addition of ten per cent. of water), and 5 parts olive oil. It should then be no more disturbed, but set aside in a cool place. The catgut should be kept separate from the watery part of the emulsion. This is most conveniently done by placing a sufficient number of pebbles into the vessel containing the emulsion to support a small disk of glass out of reach of the water, on which the coils of catgut are laid. It takes at least two months before it acquires the necessary qualities. The catgut is used in different sizes, from the thickness of a horse-hair to that of twine.

10. *Salicylic Cotton.*—Mr. Lister has of late used this to bolster up and fill inequalities of the surface. The salicylic acid not being volatile, and cotton easily impregnated by it, it forms a useful supplement to the gauze. It is prepared by first removing the fatty matter of the cotton, by boiling it in lye or other alkaline liquid. Thus the cotton becomes hygroscopic, which quality may be easily tested by throwing a small ball on water. In its natural state it will not sink; if prepared, it will go to the bottom of the vessel in a very short time. The proportions are about 8 oz. alcohol and 2 gallons of water. The addition of about 20 per cent. of glycerine is said to prevent the disagreeable dusting of the acid

11. *Sponges.*—All sponges used in connection with Lister's dressing, in the cleaning of wounds and absorption of wound secretions, should be prepared in the following manner: After being beaten, cleaned and washed out in lukewarm distilled water, they are immersed in the "carbolized solution" and kept there until needed. After use they are washed out in the solution and replaced in the vessel. In this manner they can be used over again as long as they last. In addition to the usual small dressing sponges, some larger ones are to be kept on hand. They are applied to wounds the first day after the operation to absorb the more copious secretion caused by the spray.

12. *Drainage Tubes* are small flexible rubber tubes, of the size of a small quill to that of a little finger, with numerous openings on the sides, each of half the diameter of the tube. Their use is to facilitate the egress of wound secretions without interfering with union. One or more are introduced, according to the size and number of angles of the wound, reaching to the bone. They are secured to the skin by a thread drawn through their extremity and fastened by a strip of isinglass or a small

safety-pin. They must be cut on a level with the skin, as otherwise the pressure of the dressings will obstruct their lumen. In places where the slippery rubber tube is not easily retained, as in the anus, some lint dipped in carbolized oil might take its place. Of late, Mr. Lister adds to the rubber tube several threads of catgut. The tube is removed in a few days, the catgut assisting in the drainage as long as it is necessary, and is then absorbed, the outside parts falling off.

13. *Antiseptic Silk.*—The catgut is only used in ligatures and deep sutures. For superficial sutures it does not retain its firmness long enough, and silk is preferred in its stead. This is rendered antiseptic by being steeped for an hour in a hot mixture of beeswax 10, cryst. carbolic acid 1, and then drawn through a cloth to remove the surplus wax. It is then preserved in a closed vial. In this manner it combines the advantages of the wire with the suppleness of the silk. Septic germs cannot penetrate in the interstices of the fibre, and the wax, besides increasing the hold of the knot, retains a sufficient amount of the antiseptic to destroy any germs which might enter the suture.

I might here also mention a method introduced by Mr. Lister to approximate the edges of the skin where, from loss of substance, this would be difficult, if not impossible, by superficial sutures, as in cancer in the breast when a part of the skin is implicated and has to be removed. A piece of annealed or silver wire is passed through the whole thickness of the flap, some two or three inches from its free edge, and brought out on the opposite side at the same distance. The ends of the wire are fastened over a small lead plate; thus sufficient force can be used to cover almost any deficiency. As many of these wires may be applied as the size of the wound may necessitate. The superficial sutures are then introduced, and a union by first intention may be looked for. The secretions of the wound pass through the drainage tube. Whenever the neighboring integument seems to have accommodated itself to the strain, the wires are removed by cutting them at one of the plates. I have used this once, with success, after removal of a tumor of the scalp, with a circular loss of skin of two inches diameter, and obtained union *per primam.*

In order to complete the list of dressings pertaining to Lister's system, I must add the preparations of boracic acid, which is claimed to be an antiseptic, milder than carbolic acid, but holding its properties longer.

1. *Boracic Water* ($3\frac{1}{3}$ per cent. solution of boracic acid in water). The boracic acid is obtained from borax by decomposition with sulphuric acid. The water is mainly used to moisten the boracic lint, where this is employed.

2. *Boracic Lint* is prepared like salicylic cotton, which will be mentioned hereafter. It takes the place of carbolized dressings, where these cannot be closely adapted to the skin, as in resection of the lower jaw and in harelip sutures.

3. *Boracic Ointment* (Acid borac., ceræ alb., of each 10; ol. amygd. dulc., paraffine, of each 20; fiat ungt.). This is spread on thin cotton and applied to ulcers and granulating surfaces. It is neatly fastened to the skin by painting the edges over with collodion. I have seen it used with success after ablation of epithelial cancer of the face.

In applying Lister's dressings, it must be borne in mind that they promise complete success only in operations where the prescribed precaution for destruction of germs, or prevention of their entry into the wound, have been conscientiously observed. Even the most careful disinfection of wounds which have been exposed unprotected will not always be successful, as germs may have penetrated beyond the reach of the antiseptic. Still even there the probabilities are in favor of antisepsis, and the facility of evacuation of pus by the drainage tubes, and its disinfection in the meshes of the gauze, which also prevents the entrance of new living germs, predisposes most wounds to rapid healing. We must at all times be thoroughly alive to the fact that the entrance of *one* living germ may destroy the usefulness and render an operation, which otherwise would barely affect a patient's health, the starting point of erysipelas, gangrene or pyæmia. These germs may be introduced by the surgeon's finger, by the instruments, by the very dressings, if any one of Lister's minute directions is neglected. On the other hand, if once a surgeon and assistants understand the system thoroughly, it is the easiest mode of operating and dressing; the rules are so positive that surgery loses its speculation, and a quick recovery can almost with certainty be looked for. A surgeon in one of the large German cities told me he followed Lister's system, but did not get the vaunted results. He invited me to witness a small operation which he was going to perform "under Lister." It explained to me his want of success. While he thought he followed Lister's rules rigidly, he committed nine grave faults, each of which would nullify their benefits. Still, in case of failure, he would have claimed that he failed in spite of following Lister. Such adherents are his worst enemies. The importance of the lesson may excuse this anecdote.

Whenever elevation of temperature, rapidity of pulse, erysipelas, swelling, diffuse cellulitis, symptoms of pyæmia follow an operation, we may be sure that in nine cases out of ten some fault has been committed—either the discharge has appeared on

the surface and been allowed to become septic, or the drainage tube is closed, or not properly trimmed, or not introduced to the proper point.

The following articles, as a rule, should be at hand before proceeding to an operation: Towels, soap and sponge with warm water; nail-brush and ether; two bottles carbolized water; two atomizers, filled—the second in case the first should fail; basin, with necessary small sponges and one or two large ones, soaking in carbolized solution; bottle with the chloride of zinc solution, to disinfect the hands of surgeon and assistants—the instruments and a piece of gauze should also be kept in this basin; vessel with catgut; vessel with drainage tubes; bottle with antiseptic silk, and the necessary gauze and McIntosh.

First of all, the hair in the vicinity of the place to be operated on must be carefully shaved off. The skin is then to be cleaned with soap, water and a nail-brush, and after that with ether, to remove fatty matter and detritus. The patient is then etherized.

Here I may mention that in almost all cases *chloroform* is used in Germany as an anæsthetic, and in a most fearless manner, even for a painful dressing. I was informed by several distinguished surgeons that they never had a death from chhloroform in thousands of operations. It is true they had, at times, cases of partial asphyxia and collapse, but never failed, by persistent efforts, to revive the patient. One case was related to me where attempts at resuscitation were continued for four hours on a patient to all appearances dead; the heart was during that time incited to a feeble action by electricity over the phrenic nerve, and slight blows in the præcordial region. He finally recovered. I may be pardoned this digression in view of the now general crusade against chloroform in this country.

As soon as the patient is thoroughly anæsthetized, the spray is set in operation. Should one of the extremities be the suffering part, Esmarch's bandage and tourniquet are applied in almost all cases. The only exception I know of is where extensive suppuration is going on in the limb, when purulent matter might be forced into the circulation. In that case the limb is simply elevated and a tight tourniquet applied some distance above the seat of operation. The advantages of Esmarch's bandages are too well known to need repetition.

A final washing with carbolized solution is now given to the skin, and the spray is made to play on the wound, taking care not to allow the hand of the operator to intervene. The instruments are taken from the basin as needed, and returned to it as soon as used. The blood is cleared away by the antiseptic sponges. Blood-vessels are secured with the usual forceps and

ligated. The ligation in operations performed by the "bloodless method" is done before removing the tourniquet. The place of the large vessels is well known; the small ones are usually found at the intersection of the muscles. The ligation is done with the catgut, care being taken not to use too thick a cord for small vessels, and to make a reef-knot. The two ends are cut off close. The ligature is absorbed or passes off with the discharge, if there is any. Numberless experiments have shown that catgut, if prepared as mentioned above, does not relax until a safe thrombus is formed.

Should, at any time during the operation, the spray cease to work, then the piece of gauze which lays ready in the carbolized water is to be thrown quickly over the wound and kept there until the spray is again in proper condition.

The operation being completed, the tourniquet is removed. We may always expect copious parenchymatous bleeding, partly owing to reaction after the elastic bandage, partly because the spray prevents, in a measure, the formation of clots. Arteries which have been overlooked during the previous ligation must now be secured; the rest of the bleeding can easily be stayed by compression or application of cold. The wound is then carefully washed out with carbolized water. No union of the edges is to be attempted until all hæmorrhage has ceased. The drainage tubes are then to be introduced and the superficial sutures applied with antiseptic silk. The personal tact of the operator will show him where and how many drainage tubes are necessary to facilitate the egress of the discharge. They should in all cases be first dipped in carbolized solution.

The wound is then covered with the protective, dipped in carbolized water, and over this by the lost gauze, that part of the gauze which is applied wet, as described above. Now the spray may be suspended, and the remainder of the gauze is applied.

Here I must digress to show the mode of dressing in wounds which were not made under the spray; after this the dressing is alike in all cases. In fresh wounds it is often sufficient to wash them out thoroughly with the carbolized solution. This must be done even in wounds of joints. Where suppuration has already commenced, there the carbolic acid is not sufficient to enforce asepsis. In these cases Lister uses the solution of chloride of zinc, with which the wound is carefully swabbed out. It should be forced into every recess by the pressure of the fingers. Still such cases are always doubtful, and if they do not result favorably, the dressing is not always to blame, as the germs may have penetrated beyond the reach of the antiseptics.

We proceed now to the final dressing. A large antiseptic

sponge is laid over the protective, and over it the *lost gauze* and the eight layers of gauze, the whole retained in place with broad gauze bandages cut from the same material. They adapt themselves better than ordinary bandages, do not slip as easily, and have also antiseptic properties. A gentle, but firm, compression by them will facilitate the agglutination of the wound surfaces and the egress of the discharge. The turns, especially where they are apt to be displaced, must be secured by small safety-pins. Inequalities of the surface, where the gauze does not closely adhere to the skin, must be filled with salicylic cotton, as such places are favorite passages for the wound secretions.

The first dressing should be removed, at the latest, in twenty-four hours—sooner if the discharges appear anywhere on its surface. The changes are made under spray, which is carefully directed towards the wound while pins, roller, gauze, sponge and protective are successively taken off. The protective will be found to have preserved its natural color, if the wound is aseptic. Where decomposition is going on, it shows dark, brownish spots, caused by the action of liberated sulphur in the pus upon the lead of the oiled silk. In this manner it is a delicate test of the success of the antisepsis. Whenever the protective is discolored, the wound must be treated like a septic wound, either with carbolized solution or the chloride of zinc. The spray is to cease as soon as the lost gauze covers again the protective. The changes have to be daily ones as long as the secretions are plentiful. The wound should be interfered with as little as possible, the surroundings being gently cleaned with salicylic cotton or a sponge. If, as usually happens, the surface of the wound closes *per primam*, then two or three dressings will be sufficient. Besides the feelings of comfort or discomfort of the patient, and the staining of the dressing, we find the best indicator as to the necessity of changes in the temperature of the patient's body. Where this is normal, and the bandage unsoiled, we can pass on—everything is right. When the patient's temperature-slate shows an increase over the preceding observation, it will be an absolute indication to remove the dressing and examine the wound. In almost every instance we will find an accumulation of pus, which had not been reached by the drainage, or the tubes are choked, or some slight neglect had permitted some septic changes, as shown by the spotted appearance of the protective. A longer drainage tube, a counter-opening with a new tube, syringing with carbolic solution, will remedy the evil, and the temperature falls. The precautions must not be relaxed until the cicatrix is fully formed; a single unprotected granulation has given rise to violent erysipelas.

In conclusion of my remarks on the precautions necessary in the application of the dressings, I wish to state that the paraphernalia of the system are not as intricate and formidable as they appear on paper. In a few days they will become second nature, not only to the surgeon, but to the nurses—even to the patient. The latter will not fail to call attention to the appearance of a stain, and the nurse will no more hand a dressing-forceps without first dipping it in the antiseptic.

This report would be incomplete without the description of a modification of Lister's dressings introduced by Prof. Thiersch, in Leipzig. It consists mainly in the use of salicylic acid in place of the carbolic. Since the discovery made by Professor Kolbe, that salicylic acid can be cheaply prepared by the action of carbonic on carbolic acid, it has become available as an antiseptic. It is said to have the same properties as carbolic acid, without its irritating effects and unpleasant odor. The results attained by Thiersch seem as good as those of the carbolized dressing, and the method deserves a trial, especially as it combines with other advantages that of cheapness. In place of the gauze, Thiersch uses salicylic cotton; for the spray, salicylic solution (1 in 300); the same for washing of wounds and immersion of the sponges. The instruments are, however, oxidized by it, and should be kept in carbolic solution. The protective is not necessary, as the dressing is not irritating, and may be replaced by a piece of carbolized gauze.—A. C. GIRARD, *in his report to the Surgeon-General U. S. A.*—[*From Buffalo Medical Journal, Nov.*, 1877.]

The Treatment of Angular Curvature of the Spine by Gutta Percha Mould.—Thomas James Walker, M. D. (*The Lancet*, July 7, 1877), gives the following rules for the application of the splint which he uses in his practice:

1. To insure sufficient strength, employ a sheet of gutta percha, about one-fourth of an inch thick. 2. Take the following measurements: (*a*) from sacrum to vertebral prominence; (*b*) around the back of the pelvis, from a point about an inch anterior to the spine of the ileum to a corresponding point on the opposite side; and (*c*) around the back of the thorax, from about the situation of the nipple to the corresponding point on the opposite side. Cut the gutta percha in accordance with these measurements, allowing a margin for its shrinking, and also cut away the top edge, so as to permit of its passing under the arm. 3. To insure an accurate mould, the patient should be stripped, and seated at the edge of a feather bed; three or four strips of flannel, four or five inches wide, and long enough to surround

the patient's body and cross in front, are to be arranged like a many-tailed bandage, and so placed, that, when the patient lies down, he should rest upon them. The gutta percha softened in water (135°F.) should be lifted out of the water on a sheet of wash-leather, and laid carefully (the chamois surface upward) on the strips of flannel. The patient is now placed upon the splint —care being taken to have the splint occupy the position intended. The gutta percha is then rapidly folded around the hips, waist and thorax, being, while soft, firmly pressed in at the waist. The "many-tailed bandage" is then made to complete the circumference of the body, and bound tightly, especially around the waist. 4. When the splint has hardened, it is removed and modified, as indicated, at the regular points, and a "front" attached to it with eyelets on each side, so that it may be tightly laced; and to the middle of the top edge of the splint are attached two strong straps which cross over the shoulders and buckle in front.

The utility of the apparatus depends upon its action "as a section of an inverted cone" and its careful adjustment, care being taken to mould the splint accurately to the hips and waist, and to bring its anterior edge beyond the angle of the ribs. It should be always well laced in front.—*Hosp. Gazette and Arch. Clin. Surg.*, Oct. 1st, 1877.

The Movements of the Eyes in Coma.—Mr. Charles Mercier, Assistant Demonstrator of Anatomy at the London Hospital, calls attention to the independent movements of the eyes in coma, as follows, in the *British Medical Journal*, March 10:

In every case of loss of consciousness, in which the coma has reached a certain depth, or, in other words, at a certain stage in the onset of coma, the eyes lose their normal correspondence and move independently of each other. Usually the optic axes diverge; but divergence is by no means essential, and when it exists is only temporary. One eye may be at rest while the other is in motion, or both may be moving in different directions and at different rates—the positions assumed being often most striking and unnatural, but quite inconstant and uncertain. The movements are never "spasmodic," that is, abrupt, but always slow rolling, gliding motions. They have no relation whatever to the cause of the loss of consciousness, but only to its degree. I have seen them in coma from injury to the head, from cerebral hæmorrhage, from alcoholism, from uræmia, from "simple apoplexy" after an epileptic fit, and in profound anæsthesia from chloroform and ether. I have never failed to find them in any case of deep coma that I have examined.

The degree of coma with which this appearance corresponds is most readily observed in the artificial production of loss of consciousness by anæsthetics. After the first purely voluntary struggling, comes usually a period of quiescence and delirium, and then a second struggle, from which the patient gradually passes into "surgical anæsthesia," in which the conjunctiva is insensitive. It is usually just at this point, at the end of the second struggle, and just before the conjunctiva ceases to be sensitive, that the independent movements of the eyes begin, and the return of the optic axes to parallelism is a certain indication that anæsthesia is passing away.

So invariable is this sign, that I have been in the habit, when administering chloroform and ether, of taking these movements as the indication of the degree of anæsthesia, instead of the rather barbarous method of rubbing off the corneal epithelium with the finger.

The independent movements have also, I believe, a great diagnostic value. Since it is clearly quite impossible for any one to simulate them by an effort of will, their existence forms a ready and certain means of excluding malingering and hysteria from the diagnosis of a case. The movements are in no degree an active process, but are simply dependent on loss of control, and what Dr. Hughling Jackson calls "reduction in automaticity." In this connection, it is interesting to note that, in some of the lower animals (*e. g.* the chameleon), the eyes normally move independently.

The terms coma and loss of consciousness are used here in a wide sense, to include not only the state of profound stupor, with stertorous breathing, etc., but also all the stages which precede this graver degree.

Immediately following the above is another short communication from Dr. Francis Warner, medical registrar to the same hospital, on the same subject, as follows:

The movements of the eyes have been studied with much care, and present a field for clinical observation. I wish now to direct attention to the loss of association in the movements of the eyes in patients deeply under the influence of chloroform, and, in some cases, of disease, and of congenital defects of the brain. In the healthy subject, the eyes, when moving in the horizontal plane, are strictly parallel; when they are directed upward, they diverge slightly but symmetrically; similarly when they are directed downward they converge symmetrically. In looking at near objects they also converge. Now in each of these physiological departures from parallelism, the inclination of the axis of the eye towards or from the median plane, is equal on the two

sides, and those associated movements are supposed to be due to certain "brain centres," which govern such associated movements.

1. Preserving parallelism when they move horizontally.
2. Governing convergence when accommodating for near vision.
3. Governing divergence or convergence as the individual looks at an object above or below the horizontal plane.

When a patient is being placed under chloroform, the eyes first roll upwards as in sleep, and, in so doing, they diverge symmetrically, as when they roll up from any other cause. When the patient is fully comatose, and before he begins to breathe stertorously, there is *a loss of association* in the movements of the two eyes. At this stage of temporary brain paralysis, the eyes are usually directed in the horizontal plane (or what would be the horizontal plane were the patient in the vertical position). In this condition, *one eye may remain perfectly quiescent, while the other slowly wanders* either inwards or outwards; the same thing may then recur, or the other eye may remain at rest, or the two eyes may both move, but without any association of movements except that they both (generally at least) keep at the same level. I have myself never seen the same phenomena in the coma produced by ether—presumably because with ether surgical coma may be brought about by a less degree of brain paralysis than in the use of chloroform. This is an argument in favor of the greater safety of ether as an anæsthetic.

The following case came under my care at the Children's Hospital, Birmingham: A girl, three years of age, was the subject of permanent paralysis of one arm and leg, following convulsions in infancy. She had never been able to speak; was constantly dribbling, and idiotic in manner. On observation, there was seen to be an occasional loss of parallelism of the eyes; one would remain at rest, while the other wandered inwards or outwards; this was a chronic condition in the child, who was suffering from no acute disease.

I have seen a few similar instances—one in conjunction with two other physicians, who confirmed my observations. In a few instances, I have seen the same thing in acute cerebral meningitis. In considering the physiological significance of this condition, I think the cases quoted indicate that it is due to paralysis of certain portions of the brain, and that it is not due to any spasmodic action of the recti muscles. If it be granted that a brain centre governs the horizontal parallel movements of the eyes, this centre must be paralyzed in the condition referred to. Chloroform administered to the stage of complete surgical anæs-

thesia, and just short of producing stertorous breathing, paralyzes this centre; ether may produce surgical anæsthesia without paralyzing it. These observations are incomplete, and the deductions crude; but I have thought the subject worthy of notice and of clinical interest.—*Journal Nervous and Mental Diseases*, Oct., 1877.

Inhalation of Iodine Vapor for Hay-Asthma.—Dr. J. G. Westmoreland, of Atlanta, Ga., in the *Atlanta Medical and Surgical Journal*, Oct., 1877, says, that some years ago, about the first of September, for a case of "hay fever," the inhalation of iodine was advised. The subject, a lady of thirty-five years old and the mother of four children, had suffered regularly with the disease during the whole month of September, for a number of years. With the view of preventing the annual return she had taken daily about ten grains of quinine for a week. As usual, however, the symptoms were fully developed by the first, and the treatment was commenced about the fifth of September. One-fourth grain of morphia was given, and in an hour one grain of iodine was inhaled, by placing the remedy in a wide-mouthed small vial, sufficiently heated to change it into fumes, and inhaling through the nostrils. Notwithstanding the anodyne effect of the opiate, an unpleasant paroxysm of cough was produced, leaving the patient much relieved from the coryza and dyspnœa, however, during the succeeding twelve hours. The inhalation was repeated every twenty-four hours for several days, and afterwards less frequently for two weeks, with the effect of preventing any decided asthmatic paroxyms, during the night or day, as had been her habit.

Some bronchial and nasal trouble continued for three weeks, but such decided relief was afforded that the lady is delighted with the prospects of being rid, in future, of this distressing and unwelcome annual visitor.

More recently, a case of the same general character came under my observation, but had advanced so far towards the time of its spontaneous termination that no certain and decided results can be claimed. The inhalation of iodine was had daily, however, and followed by complete relief from the usual nightly paroxysms of asthma.

Patients suffering from this disease, and their physicians, generally feel disinclined to embarrass the already difficult breathing with the means proposed above, but my experience in the use of iodine inhalations, not only asthma, but in the treatment of ordinary chronic bronchitis, catarrh, etc., justifies the opinion that no fears need be had of producing injurious effects; and by

preparing the patient with an opiate an hour previous to the inhalation, the unpleasant cough attending it is measurably prevented.

This is the only local alterative or catheretic remedy that can be readily applied to the bronchial mucous membrane, and this the only form in which iodine can be inhaled in sufficient degree of concentration to relieve chronic disease perminently.

Alcohol and Diphtheria.—The following is a brief of a very valuable paper in the November No., 1877, of the *Proceedings of the Medical Society of the County of Kings*, by E. N. Chapman, M. D. The suggestions seem worthy of consideration:

The object of this paper is to present additional and more decisive clinical data, such as it will be difficult to explain away, or otherwise account for than by conceding a direct and positive antagonism between alcohol and diphtheria. I am now prepared not only to repeat the assertion, formerly made to this Society, that a physician, when called early, ought not to lose more than one in twenty cases, but also to announce the still more startling fact that double, yea! quadruple that number has since then been, consecutively, brought to a successful issue. In fact, diphtheria is, when attacked boldly at the outset, more amenable to treatment than many common diseases; and yet the fatality under prevalent modes of practice is as great, almost, as that of unmodified small-pox.

All local treatment is worse than useless. It exhausts the nerve-force and induces greater injection of the blood-vessels, thus favoring the exudation.

Alcohol neutralizes the diphtheritic poison, sets free the nerves of animal life, subdues the fever and inflammation, destroys the pabulum that sustains the membrane, cuts short the disease, conquers its sequelæ, and shields other members of the family from an attack. Upon the subsidence of the fever, as is usually the case in from twenty-four to thirty-six hours, a purulent secretion begins to loosen the membrane, and soon thereafter to detach it in flaky, ragged fragments. This process may take place, and recovery be possible, even when the larynx and trachea are implicated. The membrane is seldom renewed, when this secretion is maintained by a steady use of the remedy. Alcohol is as antagonistic to diphtheria, as belladonna to opium or quinia to malaria. Like any other antidote, it must be given promptly at the outset, as otherwise its potency will be lessened, perhaps lost altogether.

Alcohol does not act as a stimulant, nor induce any of its ordinary effects. Enough may be given to cause profound intoxica-

tion in health, and yet there exist no signs of excitement nor odor in the breath. Hence at a late stage of the disease it is of little avail.

Should the administration of alcohol anticipate grave symptoms by thirty-six hours, recovery is assured; should the epiglottis be implicated, a croupy cough present, or the blood much contaminated, recovery is possible; but should the larynx be involved so as to impede the aëration of the blood, recovery is improbable, though even then the secretion of pus may detach, disintegrate and supplant the membrane.

All cases of croup, on the failure of the usual remedies to subdue the harsh, rasping cough, should have alcohol added to the treatment; all cases of scarlatina, on the appearance of a membranous patch in the fauces, should be considered as diphtheria; all diseases associated with diphtheria, inasmuch as its presence casts a baleful shadow over every other morbid condition, should be disregarded, or, at least, receive secondary attention only; all the sequelæ of diphtheria—paralysis, albuminuria, hæmorrhage, anæmia, etc., etc.—should, whatever else might be demanded, be subjected to this all-potent remedy.

Quinia is an efficient ally to alcohol. It energizes the ganglionic nervous system—a member of the vital forces not less important than the vascular—and thus enables the organism to right itself and resume its functions.

Iron plays an important part at first; but later, when the diphtheritic poison has been neutralized, it restores color to the blood, imparts force to the nerves, and awakens active nutrition—matters of no light moment in most cases. At an early day, even food and other means to support nature are of slender advantage; but when alcohol and quinine have tempered the violence of the symptoms, they are imperatively demanded.

The power of alcohol and quinine to prevent blood-degeneration and nerve-exhaustion, depends on fresh air, bodily rest, mental quietude, and disuse of lowering medicines. So also the power of iron and food to restore the fluids and solids to their normal standard, is only operative by observing the same general caution as to impure air, active exertion, and heroic treatment of individual conditions.

Alcohol and quinine have no greater power to cure than to prevent diphtheria, provided they are given promptly and continuously. With thorough ventilation they are all that is needed to purify a room or a house, unless there exist some extraneous source of infection demanding special attention.

To further substantiate the virtues of alcohol in the treatment of diphtheria, I will appeal to the records of the Health Board

of this city. From the figures furnished me by two persons connected with this department, it appears:

In 1874, there were reported 1,651 cases of diphtheria; in 1875, 2,669 cases, and in 1876, 2,329 cases—making in all 6,649 cases.

During the same years, respectively, there were reported 580,-965 cases and 810 deaths from diphtheria, and 318, 451 and 412 deaths from croup—making the total mortality from diphtheria 2,355, from croup 1,181, and from diphtheria and croup 3,536. [We have copied the above figures as they appear, but they need some explanatory notes, which we do not find.—Ed.]

Now, if it be assumed that all the cases reported as diphtheria were genuine, and that the majority of deaths from croup had a diphtheritic origin, as doubtless is true, then there will be slight grounds for congratulation over the progress made by therapeutics. The mortality is truly appalling. Even including the croupous among the diphtheritic cases, the exhibit is far from flattering.

From January 10th, 1874, when I lost the young girl whose history is the first presented in this paper, to this date, I have reported 78 cases of diphtheria, and lost one only. This even does not rightfully belong to the list, as the child had been under the care of a homœopathic physician several days. A younger child lay dead in the house when I was called. Besides, the patient refused all food and medicine, and died in thirty-six hours. An older child promptly recovered.

To these 78 cases should be added some eight cases, or more, which, from the slight local trouble or other cause, were not reported, but which, from the course of the disease, I am convinced were really diphtheretic. Three of these cases—two of which are related above—from the delay in resorting to brandy and quinine at the outset, required much longer treatment than usual. Thus it appears that in a period of three and a half years 85 cases of diphtheria have been treated, successively, without a failure. What is more, not a death appears under the head of croup, or other disease, the sequel of the diphtheritic poison.

In this connection, it may be well to examine the claims of tracheotomy as a forlorn hope. The point is, will it increase or lessen the chances of recovery? Dr. Pilcher's tables of operations in this city lead to the conclusion that twenty per cent. has been saved after the failure of medicine. If this be so, then surely no case should be given up until the aid of surgery has been invoked. Such aid having rarely, or never, appeared proper in my practice, I thought the grouping of diphtheria, croup, œdema glottidis and laryngitis under one head might involve a fallacy.

I have collected together 164 operations for diphtheria and croup—43 more than were reported by Dr. Pilcher, although, by excluding those performed in other places for either disease, and those performed in this city for catarrhal inflammation—œdema glottidis, laryngitis, etc.— I have dropped many found in his tables.

Of these 164 operations, 92 were for diphtheria, of which 12 recovered and 80 died—13 per cent.; 72 were for croup, of which 15 recovered and 57 died—20 per cent. Before the appearance of diphtheria in this city, Dr. John Cochran, a bold and skillful surgeon, had seven operations for croup, all of which died; and, during the same period, seven operations for strangulated hernia, all of which recovered. Dr. I. H. Barber relates a similar experience. Dr. R. Hesse had three fatal cases in succession. Since then he has met with two cases of croup, in which the call to operate was apparently imperative. The parents hesitated and begged for time. This was allowed, and small doses of calomel were given. Eventually, when the Doctor went prepared to operate, the breathing had become so much easier that he declined to interfere. Both children recovered.

In the years '74, '75 and '76, there were 6,649 cases of diphtheria reported to the Health Department, and in the same interval 2,355 certificates were presented—a ratio of mortality greater than one to three. If, as is persistently stated, many physicians report every simple affection of the pharynx—follicular tonsillitis particularly—as diphtheria, how humiliating stands the record! The plague of olden times was not more destructive.

The Preventive Measures.—During the prevalence of diphtheria in a family, those exposed directly or indirectly to infection should be protected by having a free circulation of air through the house, and by taking a certain amount of alcohol each day until the patient has recovered. My usual prescription is here given: Quinoidine, Cinchoniæ sulp., of each 25 grains; Acid. sulp. aromat., 2 drachms; Sp. frumenti, 8 ounces. Dose, fifteen drops to a tablespoonful, four or five times a day, according to the age of the subject. To all young children and to many adults I am in the habit of directing brandy or whiskey alone, in the above proportions. For the patient, quinia is substituted for the quinoidine, and the interval between the doses shortened to one or two hours. Six drachms an hour is the maximum quantity for an adult.

Most cases of diphtheria have, in addition to the common epidemic influence, a direct exciting cause. This will be found, when contagion is excluded, to be poisonous emanations of some

kind in the house or on the premises. The *fons et origo mali* with my patients I have traced, in most instances, to sewer-gas. It so happened, two years since, that a family of mine, the subjects of ever-recurring sore throats, gastric disorders, diphtheritic attacks, was happily rid of the poison. The plumber carried an iron ventilator, four inches in diameter, from each soil-pipe where it makes the outer bend of the closet-trap to the roof of the house. This ventilator replaced a lead one of small calibre, that had proven itself quite useless. Since this work was done, all forms of filth disease have disappeared. The smaller pipe only gave egress to the gas under strong pressure; whereas the larger one acted on the principle of a flue, a draught being excited by the warmth of the gas. The larger pipe, also, permits a return current.

In building a new house, the extension of the soil-pipe to the roof would serve the purpose fully; only in this case, were there more than one water-closet, it would be necessary to carry a ventilating pipe from the outer bends of the lower traps to a point above the upper trap, and there join it to the common soil-pipe. This is to give air to the traps; for, should a flow of water take place at the top floor, it would, if of sufficient volume to fill the soil pipe, siphon out all the traps below. In other words, the water, entangling and carrying down bubbles of air as it passes the outer branch of the traps, creates a vacuum and sucks the traps dry. For the same reason, the leaders from the roof are poor ventilators, as every heavy rain will, almost certainly, empty all the traps in the house. When the soil-pipe, furnished with the air-pipes mentioned above, terminates in the kitchen flue, a perfect, or nearly a perfect immunity from the presence of sewer-gas is attained, however much it may be forced upward by the accumulation of water and filth in the sewers. When, on the contrary, the ventilator, though constructed on the same plan, terminates on the roof, I fear that the gas, not finding a quick exit above, may at times, during very stormy weather, make its way, more or less, through the water in the traps. The flue-ventilator has been adopted in one house, and the roof-ventilator in eight others of my patients. All of these houses have since—a period varying from two years to ten months—been free from diphtheria, as well as other diseases due to blood-poisoning. Previous to this improvement in ventilation, I had treated in these houses twenty-eight cases of diphtheria, together with a host of ailments arising from the one common cause. In two houses, besides these eight, the same plan was followed, only, to make security doubly secure, a trap was placed in the soil-pipe at its exit from the house, and thence a ventilator run to the

kitchen flue. In one, I had, subsequently, a putrid case of diphtheria, and in the other a fatal case of scarlatina. In each, after a month or two, the odor of sewer-gas was more perceptible than before. This plan, as possibly all others designed to shut out the sewer-gas, is certain, almost, to block up the soil-pipe, stop the draught in the ventilator, and cause an accumulation of filth and gases on the premises. To me it seems that no plan will work well in practice, unless the soil-pipe is kept open, and a free rapid exit of the gas secured at the top of the house.

[Want of space compels us to omit reports of typical cases introduced in the paper.—Ed.]

A New Alterative and Antiseptic.—Dr. E. Hermant, of Brussels (*Jour. D'Hygiene Climat.* etc., Feb. 10, 1877), for the dressing of unhealthy wounds, prescribes a mixture of equal portions of chloride of lime and tincture of camphor. This mixture produces a slight precipitate of camphor, which, after having been filtered through paper, forms a clear, stable liquid. The author recommends this mixture (chloro-alcohol) for distint purposes:

(1.) As an *antiseptic* and *disinfeciant* in gangrenous wounds, and hence it is advantageously used in gunshot wounds. (2.) As a *detersive*. In this regard, it possesses an eliminating action upon the sloughing tissues, which it causes to disappear by a sort of insensible absorption, and almost without suppuration. (3.) As a *cicatrizant*. By the constringent action which it produces in the wound, it promotes the contraction of the edges.

Styptic Colloid, as prepared after the instructions of Dr. Richardson, F. R. S., by Messrs. Robbins & Co., of Oxfordstreet, is produced by saturating ether entirely with tannin and a colloidal substance, xyloidine, or gun cotton, a little tincture of benzoin being finally admixed.—Sampson Gamgee, F. R. S., Edin., in *London Lancet*, March, 1877.

Book Notices, &c.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. Von Ziemssen. Vol. XVI. *Diseases of the Locomotive Apparatus, and General Anomalies of Nutrition.* Albert H. Buck, New York, Editor of American Edition. New York: Wm Wood & Co., 1877. 8 vo. pp. 1060.

A circular sent with this volume says: "At wholly unexpected and very largely increased cost, volume after volume [of this im-

mense Cyclopædia] of nearly 1000 pages has been published but, notwithstanding this fact, the publishers still find themselves obliged very reluctantly to extend the work to seventeen volumes." The five remaining volumes will probably contain 1000 pages each, and will be issued at intervals of three months—Vol. XIV, to treat of Nervous Diseases, will be issued in December, 1877; and in March, 1878, Vol. XIII, on Diseases of the Spinal Cord and Medulla Oblongata, will appear, etc. We most heartily commend the American publishers for undertaking to publish every line of the original without abridgement.

Our space is too limited to attempt more than a running table of contents of this sixteenth volume, now before us. Indeed, the general scope of the work is too generally known to require more. It meets, as it should, with universal favor.

The contributors are Prof. H. Senator, of Berlin; Prof. E. Seitz, of Giessen; Prof. H. Immermann, of Basel; and Dr. Birch-Hirschfeld, of Dresden.

The chapters contributed by Prof. Senator are on Rheumatism (or Rheumarthritis, as he prefers to call the constitutional disease), Gonorrhœal Arthritis, Chronic Rheumatic Arthritis, Myalgiæ of various forms, Psoitis, Gout in all its phases, Arthritis Deformans (Rheumatic Gout), Rickets, and Malacosteon (Mollities Ossium). As the pages on the treatment of Rheumatism were written before salicylic acid and salicin were introduced for specific purposes, Prof. Senator left it to the Translator, Dr. E. Buchanan Baxter, of London, to add a brief note on each of these remedies. His remarks are in general accord with the usual testimony of physicians of to-day.

Prof. Seitz contributes what we regard a most valuable chapter on Slight Disorders caused by Catching Cold—relatively trivial affections, which are not usually described in text books, but which are of daily occurrence with the practitioner, and sometimes cause him a good deal of worry.

General Disorders of Nutrition are treated of by Prof. Immermann. Over 200 pages are devoted to Anæmia alone; nearly 100 to Chlorosis; to this latter chapter is an Appendix on "Progressive Pernicious Anæmia"—the disease that was described by Biermer in 1871, since which time numberless cases have been recorded. A full chapter on Obesity is also published.

Dr. Birch-Hirschfeld's contributions are on Scrofulosis and Affections of the Lymphatic Glands in General. The section on Malignant Lymphoma (Hodgkin's Disease or Adenia) is of general importance, because of the apparently growing frequency of the recognition of the condition. The successes attributed to

treatment with arsenic would lead us to give preference to this agent.

Prof. Senator adds the concluding chapter on Diabetes Mellitus and D. Insipidus. "The latest remedy which has proved useful in one case [of D. Insipus] is jaborandi ("Laycock), * * * Sidney Ringer found ergotin efficacious, but jaborandi of no use." Since this was written, many cases have been reported showing a peculiar virtue in jaborandi, which is not limited to diabetes insipidus, but which is sometimes seen as well in the treatment of diabetes mellitus.

Lectures on Fevers. By ALFRED L. LOOMIS, A. M., M. D., Professor of Pathology and Practical Medicine in Medical Department of the University of the City of New York, etc. New York: Wm. Wood & Co. 1877. 8 vo. pp. 403.

These lectures were delivered in the Medical Department of the University of the City of New York to the class of 1876–7; and with unimportant alterations, are now presented as they were phonographically reported by Dr. Wm. M. Carpenter.

Prof. Loomis' classification includes, 1st. Contagious; 2nd. Malarial; and 3rd. Miasmatic Contagious Fevers. In the first class, are typhus, relapsing, scarlet and miliary fevers, smallpox and measles; in the second, are simple intermittent, pernicious, simple remittent and dengue fevers; in the third, are typhoid and yellow fever.

Dr. Loomis' forms of expression cannot be misunderstood; his style of lecturing is impressive; as a clinical observer, he is accurate; as a practitioner, his reputation has long been established; and as a teacher, he has no superior. These facts, coupled with that of having ourselves been one of his pupils, make us feel a peculiar pleasure in reading this book now before us. As we read, we feel that old associations are being revived.

The first lectures are on typhoid fever. After describing the Morbid Anatomy, the etiology of the fever is taken up. Dr. L. does not think that typhoid fever is ever, strictly speaking, a contagious disease, or that it is ever directly transmitted from one individual to another; nor does he think that it is ever of spontaneous origin. In view, however, of the accumulating records by other careful observers—as, for instance, cases like those occurring in the practice of Dr. Bramblett (*Va. Med. Monthly*, May, 1877)—we sometimes fear that the *possibility* of the so-called *spontaneous* origin of typhoid fever has been too positively denied. The same remark we apply to scarlet fever, which Dr. L. likewise thinks is never of spontaneous origin. We

have seen cases of each of these fevers, the origin of which could not be traced to any existing or antecedent case of disease. With present lights before us, we cannot accept the statement as absolutely proven to be fact, that neither of these diseases has not sometimes a so-called spontaneous origin. It can do no damage in practice for the present to concede the possibility of the spontaneous origin of both of these affections; to emphatically deny such possibility, may here and there cause a failure to make the correct diagnosis sufficiently early.

We wish we had the space to present a synopsis of each lecture, but we cannot yield to the temptation. In general terms, we have only to add that, for consultation purposes, the practitioner will not be able to find a better authority, or more practically useful advice than is accessible in these *Lectures*. For ourselves, these *Lectures* will be our preference.

Cutaneous and Venereal Memoranda. By HENRY G. PIFFARD, A. M., M. D., Professor of Dermatology, University of City of New York, etc., and GEORGE HENRY FOX, A. M., M. D., Surgeon to the New York Dispensary, etc. New York: Wm. Wood & Co., 1877. 16 mo.

This vest pocket book of 300 pages has been prepared to supply a want of those students and physicians who are unable to procure voluminous works. Theoretical discussions are avoided, and histological details omitted. With the exception of the chapters on Gonorrhœa and Bubo, the work has been written by Dr. Piffard. This little volume may be of use to what are known as the "busy practitioners"—those who generally are too lazy to read or write much. According to our observation, the truly busy practitioner, has been the one who reads most and writes, too, when he has on hand anything worthy of note.

Hospitals: their History, Organization and Construction. By W. GILL WYLIE, M. D. New York: D. Appleton & Co., 1877. (For sale by West, Johnston & Co., Richmond.)

The writing of this book was suggested by observation of imperfect hospital buildings in New York. The tables of mortality from preventable diseases, quoted for 1871, give to Bellevue Hospital a most unenviable reputation for that year. The statistics then were appalling.

This exceedingly readable and instructive book will be of use to any who are connected with hospital building committees, or with hospital staffs. The suggestions are based upon close observation, and a personal knowledge as a former House Physician, of the wants of such institutions.

Practical Hints in the Selection and Use of the Microscope, Intended for Beginners. By JOHN PHIN, Editor of *The American Journal of Microscopy.*

Now, that the microscope has become an almost absolute essential to correct diagnosis and treatment in many diseases, we welcome with much pleasure the small brochure named above. Practical men have not the time, and still fewer have the inclination, to wade through the didactic and voluminous works to acquire the information requisite to understand how to use a microscope. To them, the perusal of this work would be of great value, explaining in terse and concise terms the various accessories and what is really necessary for their use. Of course it would not supply the place of the standard works of Carpenter, Beale, Frey and others; but we know of no work which, in as small a compass, gives as much and useful information as to the requisites of a good microscope—the apparatus required, the preparation, preservation and mounting the specimens. It does not profess to contain the numerous illustrations of the physiological and pathological appearances and substances which can only be found in works on special subjects; but to anyone desirous of acquiring a knowledge of the instrument, its uses and mode of management, we can safely recommend it as a most useful compendium and a valuable introduction to the larger and more didactic works. J. S. W.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M. D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, etc. Part II. Philadelphia: J. B. Lippincott & Co., 1877. Royal quarto. Price, $2.50 per Part. (For sale by West, Johnston & Co., Richmond.)

The interval between the issue of the First and Second Parts of this magnificent Atlas has been due to unlooked for difficulties attending the re-production of the portraits. In future, the Parts will be issued as rapidly as consistent with the perfection of the work.

In the Second Part, now on our table, we have nearly life size chromo-lithographic illustrations painted from life of *Acne Rosacea*, *Ichthyosis* (*Simplex*), *Tinea Versicolor*, and *Sycosis Non-Parasitica*. Each of the patients described, of course present typical cases of the disease illustrated It is necessary only to state the fact that such an Atlas is being published to induce every interested practitioner to subscribe to the series.

Wood's Physicians' Vade-Mecum and Visiting List. Arranged and Prepared by H. C. Wood, M. D., Prof. Materia Medica, etc., University of Pennsylvania, etc. Philadelphia: J. B. Lippincott & Co. Copyright, 1877. (For sale by West, Johnston & Co., Richmond.)

This is another candidate for professional favor. It has a Calendar for 1878 and 1879. In the printed matter, we find a table of the metric system of weights and measures, treatment of asphyxia, poisons, symptoms and antidotes, lists of doses, use of electricity, etc., etc. The blanks are very well arranged, and explain themselves. The book has an erasable table, a pocket, and is very neatly bound. In arrangement, it is the best Visiting list we have seen except Dr. Walsh's, noticed in our last issue; in fact, many will prefer Dr. Wood's.

Among the many other publications and reprints rece d that we had desired especially to notice, are:

Toner Lecture V, on the *Surgical Complications and Sequels of the Continued Fevers.* By William W. Keen, M. D., of Philadelphia. Delivered February 17, 1877. Washington: Smithsonian Institution. Pp. 68. Price, 25 cents.

Transactions of the College of Physicians of Philadelphia. Third series, Vol. III. For sale by Lindsay & Blakiston. 1877. Pp. 214.

Transactions of the Kentucky State Medical Society. April, 1877, in Louisville. A handsome book of 216 pages, with material of onusual interest.

Transactions of the New Hampshire Medical Society, June, 1877, at Concord. We cannot refrain from extracting the following sentence from the address on Public Health by Dr. G. P. Conn, of Concord: "And what shall we say of Virginia, with its Old Dominion pride, the home of so many Presidents, refusing to vote a dollar to support and render effective its State Board of Health, while at thr same time it is seeking immigrants from England in the presence of a death-rate in Richmond a third higher than that of London for 1873, and higher than that of Bombay for 1874?"

Transactions of the South Carolina Medical Association, Charleston, 1877.

Transactions of the Medical Association of the State of Missouri, 1877.

Transactions of the Ohio Medical Society, 1876.

Communications of the Rhode Island Medical Society for the years 1876–07.

The Scientific Basis of Delusions, by Dr. George M. Beard. New York: G. P. Putnam's Sons.

Maternal Impressions, by Dr. Thomas Waddel, Toledo, Ohio, 1876.

A Review of Medicine: Its Work and its Worth, by Dr. J. R. Bronson, Attleboro, Mass.

Early Syphilis in the Negro, by Dr. J. Edmondson Atkinson, Baltimore, 1877.

Reprints of the Pamphlets of Dr. H. C. Wood, Mr. A. B. Taylor, the Philadelphia County Medical Society and the National College of Pharmacy, with a Rejoinder, by Dr. Edward R. Squibb, Brooklyn N. Y., 1877.

We regret that we have not the space even to name the many other reprints, catalogues, reports, announcements, &c., that have been received.

Editorial.

The Announcement of the Discovery of Anæsthesia, by Dr. Crawford W. Long, of Athens, Ga., made in the May number of the *Medical Monthly*, is not graciously received by some journals. The *Medical Times and Gazette*, Sept. 1st, 1877, says: "The matter seems of little importance, and at all events requires more authentication." One half the testimony recorded by Dr. Sims in his magnificent paper, which gives the credit to whom it is due, had it supported the claims of one from another section, would have been heralded with commendation from pole to pole; but apparently because Dr. Long has been too diffident to be continually re-asserting his claims, the rich legacy of an imperishable name is to be taken away.

It is a misfortune that Southern physicians generally are so indifferent to fame as not to make their voices heard—when they have anything to say worth recording. There is a kind of professional pride and zeal which every one should have who is devoted to his studies. We can but admire the self-sacrificing devotion of a Sayre who, prompted solely by a love for the professional reputation of America, goes over to Europe at his own expense to demonstrate to foreign physicians the superior value of the method he adopts for the treatment of Pott's disease. In this way, more than any other, he attracts attention to the attainments of the profession of this country, and Europeans thus learn that there are teachers as well as pupils in America. The profession of the United States is entitled to a foreign reputation

which it has not yet acquired, and especially are there physicians in the South and West who have just claims to eminence which they very wrongly do not press.

Our remarks are not to be misunderstood. Honesty is not only the best policy, but is the truest badge of greatness. Accord worth to whom it is due. It is only because in certain journals of a sectional circulation the credit of the discovery of anæsthesia is not duly awarded to the real discoverer—apparently because Dr. Long, through modesty, has not pushed his just claims—that we have written as we have. Let us learn the practical, common sense lesson, if you have got anything to do, do it yourself.

The Medical Society of Virginia held its eighth annual session in Petersburg, October 23d, 24th and 25th. The President, Dr. James L. Cabell, of the University of Virginia, presided over the meetings. On his retirement from office, he was elected an Honorary Fellow of the Society. Dr. John Herbert Claiborne, of Petersburg, was elected President for the ensuing term. The next annual session of the Society will be held in the city of Richmond, in a hall and at a time to be hereafter designated. But as the Transactions of the late session are to be published, by vote of the Society, in connection with the January number, 1878, of the *Virginia Medical Monthly*, as in former years, we will not anticipate any of the pleasure to be enjoyed by those who may read the papers. We have only to add that the recent session was a brilliant success in all respects. The attendance was larger than it has ever been, except when the Society convened in this city, where about 50 Fellows reside. About 45 doctors were admitted to membership. The interest developed and manifested is encouraging, and should be fostered. The papers presented were first rate. The entertainments were excellent and whole-souled.

It was a special pleasure to us, as it was to the Society, to meet as a delegate from the North Carolina State Medical Society, Dr. C. J. O'Hagan, of Greenville, Pitt Co., N. C.

The attendance of fraternal delegates from sister State Societies, is an evidence of professional regard that we, of Virginia, most highly appreciate.

We may here remark, in advance of official publication that the executive authorities of the *Association of Medical Officers of the Confederate States Army and Navy* contemplate holding another meeting of that Association in this city during the week in which the State Society is to convene. Correspondence in reference to this Association should be addressed either to the

President, Dr. Hunter McGuire, of this city, or to the Secretary, Dr. John M. Payne, also of this city. These officers have the promise of several unpublished valuable historical papers relating to the medical department of the late Confederacy. These records should be collected at once, as those who can furnish the information are year by year passing away into lamented graves.

Dr. J. Marion Sims.—From an "Extra" of the *St. Louis Clinical Record*, September, 1877, which contains an *Editorial Interview* (18 double column pages) *with Dr. J. Marion Sims in Relation to the Woman's Hospital Controversy*," we learn "that his stay in Europe is likely to be prolonged until September, 1878. His reception there has been most flattering. He was made Honorary President of the International Medical Congress, which met at Geneva on the 9th of September. It is very evident that the personal and professional jealousy which has made his stay in his native land so uncomfortable, has not extended beyond the seas.

He is now busily engaged upon the revision of his *Uterine Surgery*. The book will not be ready for the press for some months. When it appears, we have no doubt it will excel anything that has ever been written upon the subject, and will permanently remain a fitting monument to the fame of one of the few who have really given a strong impulse to the advancement of medicine."

Naphey's Therapeutics.—Dr. D. G. Brinton, of Philadelphia, Pa., the publisher of this most excellent work—useful to every practitioner—informs us that the edition published during the early part of 1877 is already entirely exhausted. No higher testimony to its worth could be given. The fifth edition is in active preparation. Competent assistants are helping to make a most thorough revision and very large additions. Indeed, so extensive are the latter that the two parts into which the work is divided, viz: 1, Medical Therapeutics, and 2, Surgical Therapeutics, will each make a volume by itself quite as large as that which embraced both divisions in the last edition (about 600 pages). They will be printed on handsome tinted paper, in the best style, and each part, as wholly independent, will be sold separately if desired. Original in design, and carried out with vast research, this work may justly claim precedence in real, practical, everyday value over any others ever issued by the American medical press.

Dr. Lewis A. Sayre's New Work.—During a recent professional visit to New York City, we had the pleasure of seeing the advance sheets of Dr. Sayre's new book on *Spinal Disease and Spinal Curvature: their Treatment by Suspension, and the Use of the Plaster-of-Paris Bandage.* This duodecimo of about two hundred pages was prepared during the author's recent visit abroad, at the earnest solicitation of many of the European profession who witnessed the marvellous results of his plan of treatment of spinal disease and curvatures, and is about now being issued by the well known publishers, Smith Elder & Co., 15 Waterloo Place, London, England. Messrs. G. P. Putnam's Sons, of New York City, have very commendably undertaken the publication of an American edition. The suggestions of the author are so worthy of attention, the means of treatment so simple, and the results so remarkably successful that no one in the profession should feel himself properly equipped without having read Dr. Sayre's contributions on this subject.

Baths in the Summer Complaint of Children.—A subscriber in Nevada, in a personal note to us, makes the following suggestive note: "In the *Monthly* for September is an article whose value is the report, as the fruit of experience, that the summer complaint of children can often be checked by baths containing astringent principles, when other measures fail. Would not the water, without the contained astringents, be equally efficient? It is a matter of independent record, well worth the attention of all practitioners in warm climates, that the thermic diarrhœa of children are often admirably controlled by the apyretic influence of comparatively cool baths."

Dr. H. Otis Hyatt, of Kinston, N. C., in a very interesting paper in the September No., 1877, of Mr. Henry C. Lea's reprint of the *Obstetrical Journal of Great Britain and Ireland*, establishes his claim to priority in the use of elastic pressure for the arrest of *post partum* hæmorrhage. His paper on "*Fifteen uses for the Condom,*" was read at the November meeting, 1874, of the Eastern North Carolina Medical Association.

The North Carolina Medical Journal, we are informed, will be revived in Wilmington. The fact that Drs. M. J. DeRossett and Thos. F. Wood are to be the editors is an assurance that it will merit success. See advertisement.

Diphtheria, we are informed by Dr. R. W. Martin, of Chatham, Va., is prevailing as a malignant epidemic in Pittsylvania county, Va. In the worst cases, the posterior nares and antrum are the favorite points of attack.

No Yellow Fever in Jacksonville, Fla —False and damaging reports having been circulated to the effect that Jacksonville is suffering from the scourge of yellow fever, the Orange Park Company have issued a circular, dated Sept. 20, stating that "there is not, and has not been, a *single case* of that disease, or anything approaching it, within our borders or vicinity." The disease does prevail at Fernandina, on the extreme northeastern boundary of the State, having been brought there through the negligence of her port officials, by a Norwegian barque. Jacksonville being thoroughly quarantined, and with nothing in its limits for the disease to feed upon, there is no reason why yellow fever should be expected there, and why visitors should stay away."

The Medical Department of the University of Michigan, at Ann Arbor, began its present session with twenty-five more students than that of last year, showing that the larger part of medical students are not eager to secure their diplomas in the shortest possible time. This institution, which has so many causeless bitter enemies, has passed through the recent fires, and is cleansed of the dross and now shines brightly, as new, pure metal. The Board of Regents plead in behalf of higher medical education, and are taking praiseworthy steps to advance in that direction.

Messrs. John Reynders & Co., Surgical Instrument Makers etc., 309, Fourth Avenue, New York, are especially deserving of our acknowledgments for favors shown us during a recent visit to their city. It was to us a matter of information as well as of pleasure to have the privilege of seeing the new articles in their line of manufacture. They keep an excellent stock on hand, manufacture to order satisfactorily, and customers will receive courteous attention, whether in person or by letter.

The Medical Society of the City of Wheeling and County of Ohio at its ninth annual meeting, October 4th, 1877, elected the following officers for the current year: Drs. W. J. Bates, Sr., President; L. D. Wilson, Vice-President; D. B. Ward, Secretary and Curator of Museum; J. C. Hupp, Treasurer; Board of Censors, Drs. Frizzell, Hildreth and Hazlett. There are forty-five practitioners of medicine in Wheeling. Of the twenty-six who claim to be regulars, twenty-four are members of the Society. During the past year, Drs. Bagwell and Cummins have died; two have been dropped from the roll; and five have been added.

Dr. John C. Peters has been re-nominated without opposition to the Presidency of the Medical Society of the County of New York. This is a merited compliment.

A Case of Malingering Dumbness.—*The State* and other papers of this city have published reports of the case of James Littlepage, who was convicted of forgery and sentenced to the Penitentiary. When he was convicted on March 17th, he lost his speech, since which time he has been dumb. This was one of the principal grounds upon which an application for pardon was based. Governor Kemper appointed Drs. L. S. Joynes, J. S. D. Cullen, M. M. Walker, I. H. White and F. D. Cunningham as a commission of medical experts. On November 7th, they visited the prisoner, and after vainly endeavoring to get him to speak, they administered ether. As soon as he was under the intoxicating influence of ether, he began to talk plainly and answered a number of questions put to him. But after the effects of the ether had passed away, Littlepage again refused to speak. Some sore throat, with elongation and tumefaction of the uvulæ, and redness of the mucous membrane covering the palate is the only physical disease of which the Commission found satisfactory evidence. The prisoner also professed to be suffering severely with rheumatism, with consequent contraction of the right knee-joint, and great impairment of power, not only in the leg, but also in the corresponding arm. But when he was under the influence of the ether, the bent leg became straight, and was used without apparent loss of power. The Governor, of course, refused pardon.

Packer's Pine Tar Soap is the best preparation of the kind that we know of. As the result of our experience with it, we take pleasure in recommending it for the purposes named in the advertisement. It is for sale in Richmond by Messrs. Polk Miller & Co. Dr. Edward Sutton Smith, of New York City, among others, says that three years of personal experience has convinced him that it is the best soap in the market. Such testimony is general.

Messrs. Lindsay & Blakiston have just published an alphabetically arranged catalogue of their publications, a new issue of the Medical Intelligencer, containing their new books, and a classified list of their other works—all of which are distributed free upon application. Very considerable reduction has been made in the prices of many books to suit the times.

The Hospital Gazette and Archives of Clinical Surgery is a new journal formed by the union of the two heretofore separately published. Although a young journal, its opportunities are good, its editors excellent, its merits great, its field useful. See advertisement.

The Articles by Dr. C. G. Polk on the Glycerite of Kephaline, have become the subjects of very harsh and vindictive criticism in several of the journals, and which have even led one or more journals that published his articles to offer apologies for so doing. We have no such apology to make to any one. Dr. Polk affirms upon what seems to us to be sufficient evidence, that glycerite of kephaline is useful in brain or nervous exhaustion, in consumption, etc.; and before we can regret having made this publication, it is to be proven that Dr. Polk's facts were all fancies, and that kephaline itself has no practical value in disease.

We confess, however, to some surprise at a recent editorial in the *Hospital Gazette and Archives of Clinical Surgery*; as also at one in the St. Louis *Clinical Record;* and again at a letter from Dr. Samuel R. Percy, of New York, in the Philadelphia *Medical Times*, November 10th, all of which denounce in unmeasured terms Dr. Chas. G. Polk. Because of the unpardonably severe nature of these several publications, should they be untrue, and as the *Medical Monthly* has been made one of the so-called "innocent victims," it is but just to Dr. Polk, to our subscribers and to ourself, that we should give editorial publication to the following letter. This letter was written before any other journal than the *Hospital Gazette* had too rashly and causelessly, as it now appears, attacked the personal character of Dr. Polk:

Dr. Polk and the Regular Medical Profession.

2349 Catharine Street, Philadelphia, Pa.,
November 4th, 1877.

Mr. Editor,—It is but just to yourself, and the readers of your excellent journal, who have so kindly and appreciatively received my paper on *Tubercular Phthisis*, that I denounce the charge contained in the *Hospital Gazette*, and that I am connected with the American University, as utterly false. I am not connected with any medical or pharmaceutical school, and am observing to the best of my knowledge and belief, the Code of Ethics of the American Medical Association. The other statements in the editorial of the *Hospital Gazette* are so transparently false, that I need not discuss them.

Yours, C. G. Polk, M. D.

It is due to Dr. S. R. Percy from us to state that we did not recognize in Dr. Polk's article in the October number of the *Medical Monthly* any attempt even at a "personal attack" upon himself. If we had thought it a personal attack, we would not have admitted it, as we attempt to exclude personalities from our columns.

The Delay in the issue of this number has been due to unavoidable circumstances. Our December number we hope to present on time.

Obituary Record.

Dr. J. C. Herndon.—It was with feelings of the deepest sorrow and most poignant grief to a large circle of relatives and friends in this city that the news was received yesterday of the death of this accomplished gentleman. It occurred at 8:30 A. M. yesterday at Fernandina Fla., whither he had gone to attend the sick and dying of that plague-stricken city.

Dr. Herndon was born in Fredericksburg, Virginia, and was the son of B. S. Herndon, at present of Savannah, and a nephew of the late Commodore Matthew F. Maury. He was therefore of one of the most distinguished families of his native State, and was, at the time of his death, about forty-six years of age He was a graduate of the University of Virginia, and also of the Medical College of Philadelphia. After leaving this latter institution, he became a resident physician of the Brooklyn (N. Y.) City Hospital, which position he held for several years, when he applied for and obtained the position of surgeon in the United States Army. He passed with distinction his examination before the Army Medical Board, and having received his commission, served at various posts for about twelve years, up to the outbreak of our late war.

At this time he was in California, and, like a true Virginian, feeling that his allegiance was first due to his State, he hastened, in that spirit of conscientiousness which was the marked characteristic of his life, to offer to her his services. They were promptly accepted, and no higher tribute could be paid to his worth than that which was paid by his being offered a position as Assistant Medical Director on the staff of General Robert E. Lee, where he served for nearly the entire war.

The conflict being ended, Dr. Herndon came to Savannah, and has been for years associated in the practice of his profession with his father. Here his whole-souled, genial nature attracted to him hosts of friends, all of whom suffer keenest regret at his so sudden, though not altogether unexpected, demise. During the whole of the epidemic last year, though never in his life having passed through such a scene, he remained steadfastly at his post of duty, and many a dying man, as well as many who recovered and live among us today, were the recipients of his ten-

der care and unceasing devotion during their sufferings. He passed through that trying ordeal unscathed, only to fall a victim to the same dreaded disease at this time.

When a good man dies it is always a source of regret; but under circumstances such as attended the death of Dr. Herndon, it is especially sad. Full of life, of bright hopes for the future, he, when duty called, took his life in his hand and unhesitatingly set about doing his utmost to relieve his sick and dying fellow men. Fully aware of the danger he was incurring, and without hope of reward beyond that which fidelity to duty always gives, he, without bravado or noise, quietly and unknown to many of his most intimate friends, at the first call, started, only a short time since, to his post of duty and of death. He was, indeed, as simple-minded, honest and guileless as a child, but withal possessed of a spirit of true bravery and noble heroism which a Cæsar or a Hannibal might have envied. No wonder so many in this city, endeared to him by the strongest ties of love and friendship, feel an individual loss in his sudden taking off.—*Savannah Morning News.*

Dr. F. P. Wellford, of Jacksonville, Florida, is another of the medical heroes who has fallen under the blade of the fell-destroyer at Fernandina during the early part of the past month. We had expected to be able to present a sketch of his life in this number, giving exact dates and incidents, prepared by one who wields a graceful pen, and whose relations to Dr. Wellford were such as to make the account accurate; but up to the last moment of going to press, the biography has not been received.

Dr. Wellford was born in the town of Fredericksburg, Virginia, about the year 1830. During the war, he rendered his medical services to the Confederacy. When the swords of battle had been laid aside, he moved to Jacksonville, Florida, where he entered upon the practice of his profession. Here he gained friends in and out of the profession, as was attested by the honors conferred upon him by the former, and the extensive practice he had secured among the latter. At the last annual session of the Florida State Medical Society, he was elected President of that body. By his indomitable energy, and by availing himself of his great popularity with the profession throughout the State, he had succeeded in inaugurating plans for the more thorough development of professional fraternity. But it was not reserved for him to witness the good work of his own hands. Touched by the feelings of manly sympathy for the deserted, distressed and afflicted people of Fernandina, when their call for medical services was heard, he ignored the thought of self-in-

terest and of self-preservation even, in order that he might extend any assistance in his power to the truly needy. He went from a sense of duty; he fell as Christian heroes fall in battle. The governing principles of the Christian faith, as he conceived them, directed his action. He has gone down to a lamented grave, over which garlands of evergreens will be strewn by many who knew him scarcely long enough to fully appreciate his true worth.

But we will not trust to our feelings to write more. We were not personally acquainted with Dr. Wellford; he was simply a subscriber to the *Monthly*. But there is something so touching in the deaths of the two Virginians named in the obituary department of this number, and the pure motives which prompted them to risk their lives and to die among strangers, illustrate so beautifully the heroism of our truest men, that their names should be carved on imperishable shafts.

Dr. Paul F. Eve.—The *Nashville Christian Advocate*, of November 10th, says: "We were shocked on Saturday morning, November 3d, to hear of the sudden death of our venerable friend, Dr. Paul F. Eve. He was making a professional visit to a patient when he was suddenly stricken by the unerring archer, was taken to a room and instantly expired. * * * He has long been in the front rank of his noble profession. * * * At our request, he wrote perhaps a hundred monographs—sketches of Southern physicians—for Johnson's *Cyclopædia*, which was to him a labor of love. * * * Through the kindness of Col. Cole, a special car was detailed to transport the sacred remains, with the family and friends of the deceased. He sleeps with kindred dust in Augusta, Ga. The faculties and students of the medical schools, the city physicians, the Nashville Medical Society, all held meetings, pronounced eulogies, and passed resolutions in honor of the deceased."

This Nestor of the profession was in his 72d year at the time of his death. He was an exemplary member of the Presbyterian Church. His fame as a surgeon was world-wide. In the death of this great man, the Church has been deprived of one of its most efficient members; the young of a model of virtue; the old of an example of labor; the poor of a benefactor; the State of an eminent citizen; the medical profession of one of its brightest ornaments.

Dr. Sterling B. Neblett, of Lunenburg Co., Va., according to a correspondence in the Richmond *Daily Dispatch*, died during the last week in October, 1877, age about 55 years.

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VOLUME IV—No. 9. WHOLE NUMBER 45.

RICHMOND, DECEMBER, 1877.

Original Communications.

ART. I.—*Hysteria.* By JOHN C. PETERS, M. D., President of the Medical Society of the County of New York, Vice-President of the New York Therapeutical Society, etc., etc. (Read before the New York Neurological Society.)

Gentlemen,—I wish to commence at once with the statement of my belief, that hysteria is a disease of the brain and nervous system, and not merely one of the uterine or sexual system. I am perfectly willing to admit that there is a large number of men, and a very much smaller proportion of women, whose whole lives seem to pivot about their genital organs, either knowingly or unwittingly, voluntarily or involuntarily; still I must protest against the false, debasing and vulgar notion, that every hysterical person, male or female, has some disease of, or has abused his or her procreative instruments.

I have seen young girls and unmarried women rendered nervous and hysterical by every crushing sorrow, such as the sudden and painful death of some of those nearest and dearest to them, as of a favorite brother or a sister, treated for uterine disease, of which there was not a trace. I have also seen such treatment forced upon women suffering acute mental agonies caused by separation from their children, when they could no longer endure the refined cruelty or gross brutality of persecuting husbands. Such cases are not at all uncommon, and a protest should be made against them. I have seen an enlarged, pouched and paralyzed rectum treated by uterine pessaries, and applica-

tions of iodine to take off the supposed pressure of a uterus already high up and involuted by the change of life.

Uterine specialists seem scarcely as frank as a celebrated professor and surgeon who delights in diseases of the rectum, whom I once wished to consult about the sterility of one of my patients, and met with the reply: "I know very little, medically or surgically, about the uterus and vagina—in fact scarce more than a gentleman and scholar ought to be familiar with; but if your patient has any disease of the rectum, I think I can benefit her."

Sydenham had a much clearer idea of hysterical disorders than many modern specialists, and placed great stress upon antecedent wear and tear of body and mind, debility, anxiety, suspense and worry as operative in unsettling the functions of the brain and nervous system. He gives the case of one, whom he calls a very ingenious gentleman, who had just recovered from a long fever, in which he had been bled three times, purged violently, and forbidden all animal food during his convalescence. At his first visit, the patient talked mildly on some subjects; but soon his under lip was thrust outward, and was in frequent motion, as happens in fretful children who pout before they weep, quickly succeeded by the most violent fits of crying that Sydenham had ever seen, attended with deep and most convulsive sobs and sighs. Sydenham decreed that these hysterical attacks proceeded from an irregular motion and action of the vital or nervous spirits, occasioned by the long continuance of the fever, the profuse evacuations and consequent exhaustion, and by the emptiness of the stomach and vessels from the abstinence from flesh. Hence he ordered him a roast chicken and some wine, and tells us that by continuing thus to eat and drink, his disorder soon left him.

Sydenham, of course, as such an astute observer and elegant writer would be sure to do, has given an excellent description of the mental characteristics of the hysterical. He says:

"Their unhappiness does not only proceed from a great indisposition of the body, for the mind is still more disordered, it being the nature of this disease to be attended with a curious and subtle kind of almost invincible perversity and despair; so that they cannot bear with patience to be told that there are any hopes at all of their recovery; easily imagining and preferring to believe they are subject to all the miseries that can befall

mankind, and presaging the worst and strangest evils to themselves. Upon the least occasion, they also indulge in miserable little fits of terror, anger, jealousy, distrust and other hateful and disagreeable passions. They seem to abhor joy, and hope and cheerfulness, which, if they accidentally indulge in, as they seldom do for a short time, they quickly chase away. And yet these pleasing, but fleeting emotions of happiness, seem to disturb their minds as much as the more depressing passions do. So that these wretched and troublesome creatures preserve no agreeable mean in anything, but are constant only to inconstancy. They love the same persons extravagantly at one time, and soon after hate them without a cause. This instant they propose doing one thing, and the next, change their mind and enter upon something contrary, but without finishing it before they dismiss it for something else. So unsettled are their minds, that they are never at rest, even in their sleep. Sleep to others is the natural and rational relief from care and inquietude; but to them many troubles and fears arise, for they dream no pleasant things but only of funerals, ghosts or misfortunes. So much are they distempered in body and mind, that it seems as if this life were to them a purgatory to expiate offences, which only some irrational creatures could have committed in a preexistent state. Nor is this only the case in those who are always hateful and disagreeable, but even in those, who, excepting when in these preposterous passions, are judicious persons; and who, for profoundness of thought and solidity of speech, greatly excel those whose minds were never disturbed by these tormenting freaks.

"This very dreadful state of mind is not most prevalent merely in those who have had great misfortunes, grief, care, hard study and the like, when combined with an ill and weakly habit of body; but may be found in those who have only imaginary evils to contend with.

"This disease is so common that few women escape it entirely, except such as are formed with good bodies, great common sense, and have to work hard and fare plainly. It is also not more remarkable for its frequency, than for the numerous forms under which it appears, resembling and imitating in the most marvellous manner most of the distempers wherewith mankind is affected; for in whatever part of the body it takes its seat, it immediately commences to ape* and mimic the symptoms which are peculiar to the diseases of that part. So that, unless the

*Some of the ancients called it the ape-like disease, and applied the old apothegm, *Simia quam similis, turpissima bestia nobis*, both to monkeys and hysterical subjects. "Like an ape, to us, the wickedest of all animals."

physician be a person of judgment and penetration, he will easily be deceived, and suppose such miserable symptoms arise from some essential and straightforward disease of this or that particular part, and not merely from the deceptive hysteric passion."

To exemplify this remark, we are told that hysteria:

"Sometimes attacks the head and causes a transient apoplexy, which also terminates in an equally ephemeral hemiplegia. Sometimes it causes terrible convulsions, much like the epilepsy; so that the seemingly feeble patient can scarcely be held by the attendants. Sometimes it seizes the vital parts and causes violent palpitations of the heart, with a rising of the abdominal viscera towards the throat.

"Sometimes it affects the lungs, causing an almost perpetual dry cough, which shakes the chest and brain so that the patient's senses also seem disordered.

"Sometimes it seizes the bowels like the iliac passion, with extreme pain and copious vomiting, in which the patient is so highly terrified as to despair of recovering; and the despair may be followed by an unusual jaundice from spasm of the gall ducts.

"Sometimes it attacks one of the kidneys like a violent attack of the stone, not only with respect to the kind of pain, but also by its extending along the whole track of the ureter.

"The bladder is also occasionally affected with the delusory symptom, which not only causes pain, but retention of urine.

"Sometimes seizing the stomach, it causes continual vomiting, and at others, fixing in the intestines, it occasions an obstinate hysterical purging.

"But the most frequent of all the tormenting symptoms of the disease, is a *pain in the back* or spine, which generally accompanies even the slightest degree; so that the parts they affect cannot bear the touch, and after they have gone off remain tender and sore, as if they had been severely beaten, &c." [spinal irritation].

Sydenham placed the basis of the disease in a weakness of the textures of the body and mind, whether that was natural or adventitious. This debility or want of firmness of texture allowed of irregular action or motions of the animal or vital spirits, or nervous forces, which then became easily detached from their regular places of resort, and fell upon other organs in various directions, especially if aided by the least discomfiture or accident. For as the body is composed of parts which are manifest to the senses, so doubtless the mind consists in a regular frame-

work or make-up of the the vital spirit, whose highest operation is the reason. But if this become less firm, disordered action and strange results will ensue.

We will now examine the opinions of a few of the former writers on the pathology of hysteria, and perhaps throw out some hints in a new direction.

The term hysteria, as is well known, is derived from *hystera*, the womb. It arose from obsolete notions about the disease, which was supposed to originate in an angry and disappointed womb, which, not being allowed to swell up and rise in the natural way by impregnation in involuntary nuns, old maids, and young widows, tore away from its attachments, like a balloon in a high breeze, and mounted up through the bowels and stomach, tearing and rolling its way along, until it was stopped in the narrowest part of the œsophagus, where it was compressed between the larynx and spine, causing choking, strangling, and finally, convulsions.

This array of symptoms was called the rising of the "mother" or womb, or the strangulation of the womb, or "fits of the mother." This was long a so common and popular view, that Shakespeare even makes King Lear exclaim when Gloster related the cause of his being put in the stocks (quoted by Aitken):

> "Oh! how this "*mother*" swells up toward my heart!
> *Hysterica passio!* down, thou climbing sorrow,
> Thy element 's below."

Some of the ancients did not believe in a material ascension of the womb, but supposed that the vital spirits or a nervous aura were copiously collected in the lower belly, and rushed with violence, like a fierce wind, through the fauces and occasioned commotions and convulsions in all the parts through which they passed; puffing up the belly like a ball, and leaving other parts so destitute of spirits and vitality, that they became as cold as dead bodies, although the pulse remained in its natural state.

This funny theory is only one step lower than that of Tilt and others, in more modern times, who say there is first, an undue accumulation of nervous power in the brain and nervous system, and when the extreme point of saturation or accumulation is reached, an explosion comes on and the patient is either, as old Burton says, "giddy from constitutional joy, or fuddled with ani-

mal spirits;" or is seized by successive convulsive attacks, which consume or exhaust this accumulated nervous poison, and relieve the patient for a time; but leaves her exhausted and predisposed to the return of similar attacks.

The routine treatment of hysteria has always been based upon this wrong hypothesis of the involvement of the womb. The ancients believed that this organ was so disgusted whenever neglected by man, that it broke away from its usual resting place and went roaming about; hence roses, lavender, and other sweet smelling plants were applied to the vulva to coax the womb back again; while assafœtida, hartshorn, burnt feathers and other pungent and disagreeable things were held to the nose and mouth to frighten it down the gullet again. They sometimes took precious good care to have a big bunch of feathers, and to burn them so close to the patient's head that the eyebrows and eyelashes were singed, and the hair of the fair sufferer was set on fire. This was rightly supposed to be calculated to indispose her to any unnecessary repetitions of the attacks.

The uterine origin of hysteria was believed in by Hippocrates, who is made to say by Sydenham, that the womb is the origin of six hundred real evils, besides innumerable minor calamities; also by Aretæus, Galen, Ætius, Paul of Eginetus, Ambrose Paré, Zacutus Lusitanus, Vesalius, Morgagni, Sauvage, Cullen, Pinel, Lisfranc, Dubois, Landowzy, Piorry, and many thousands of the greater and lesser lights in medicine.

Another allied theory was that malignant vapors were generated in the womb from the spoiling of retained blood or mucus in it (just as urine becomes offensive and ammoniacal from decomposition in the bladder); and the nasty vapors then spread through the bowels and stomach to the throat and head, causing all kinds of pains and spasms, besides a thousand and one strange feelings. Spoiled male or female semen was regarded as another cause of hysteric attacks or vapors, and many cases are described in which sterile married women became bloated up so that they thought they were pregnant, and had innumerable nervous attacks. This is still a prevalent view among the curious laity, and physicians are occasionally asked about the truth of the notion.

Andral was among the first to admit a simultaneous irritation

of the womb and brain as necessary to an attack of hysteria; while Tissot, Bœrhaave, and Van Swieten thought the nerves of the pelvis were first in fault, and secondarily, those of the whole nervous system, including the brain.

Bichat was the first to locate hysteria in the ganglionic nervous system; while Charles Lepois has the honor (according to Sandras) of being the first to regard it as an idiopathic affection of the brain and mind. This last view was sustained by Willis, and expanded and patronized by Rostam; and was, at one time, supposed to be reinforced by discoveries which were made of numerous tactile corpuscules of Meissner, Wagner, Krause, Paccini and Vater—not only in the subcutaneous layers in the palms of the hands and soles of the feet, but also all over the articular surfaces of the extremities; in the substance of the muscles; in all the great plexuses of the sympathetic system, particularly near the pancreas, in the mesentery, and near the coccygeal gland. Many pains in the abdomen resembling peritonitis, colic, &c., were supposed to arise from excitation, or irritation of these corpuscules, as were numberless painful nervous affections of the joints, muscles, &c. This notion was also supposed to be corroborated, by some, when small nerve cells, like those of the sympathetic system, were also found in the substance of the brain and spinal marrow.

A great diversity of opinion prevails among the best modern writers. The majority of gynæcologists, perhaps, trace the disorder, both in men and women, to derangements of the sexual apparatus, while the greater number of writers on general medicine locate it in the brain and nervous system. The few cases that I have seen in men were connected with an half idiotic state of the mind, coupled with sexual excesses, although the brain and nervous system had been feeble long before puberty.

There is a class of plants called *Hysterandrious*, or those having more than ten stamens inserted into one ovary; but this term has never been applied, I believe, to male hysterical subjects, who, in fact, generally have too little to do with the ovaries and their appendages in the natural way.

Now, the majority of modern writers on practical medicine assume that hysteria is not necessarily associated with disease or derangement of the generative organs, in either sex. Reynolds

says, "such association may and does very commonly exist; but the true nature of the malady will often be overlooked if regard be paid exclusively to that particular cause." But, of course, there is still some discrepancy of professional opinion about this matter; thus Landowzy asserts that in twenty-six out of twenty-seven of his cases, there was some abnormal condition of the sexual organs; that in fifty-eight out of sixty-seven other cases, there were material or organic affections of the generative apparatus; and that in nineteen cases the hysteria was cured by the removal of the genital affection. But Russell Reynolds, with whom I agree, says: "As far as his experience extends, it is the exception, and not the rule, to find any definite malady, or other decided complaint in this direction; while in a *vast* number of cases there has been absolute health in all particulars relating to the reproductive organs." Again, Professor F. Jolly, in the 12th volume of *Ziemssen's Cyclopedia*, German edition, says, p. 461, "He must state emphatically that hysteria is often entirely independent of either physiological or pathological processes in the sexual organs." Scanzoni and Annan found about 20 per cent. of their hysterical patients with perfectly normal genital organs. Von Franque noticed the same; so that at least one-fifth of all hysterical subjects are free from such diseases. In forty *post mortem* examination of cases, in which hysteria was also present, in thirteen, or one-third, there was no disease of the uterus, ovaries or Fallopian tubes. Professor Jolly, himself, believes, from his own experience, that there is no connection between hysteria and sexual disease in more than one-half of all the cases; and when it is present, it merely stands in the relation of an occasional or exciting cause, which is operative only when the predisposition to hysteria already exists. Cancer and all the severer forms of uterine disease are rarely attended with hysteria; while the slighter degrees of fallings, versions, flexions, and the lesser shades of inflammation and ulceration of the uterus and ovaries are very apt to be attended with it. Grave diseases seem to exclude it, and minor troubles to invite it; whence, as Reynolds says, "Some people become more or less hysterical about anything that is wrong in the performance of any of their functions; and it is both obvious and notorious that the uterine functions are invested in the minds of many, even sensible women with an

amount of importance that is more than their physiological due. Hence it is that menstrual and other sexual derangements are regarded by them as exerting much more influence than those of the digestive or excretive organs, and are therefore brought more prominently forward in the statement of their cases. That they do exert this excessive influence is due mainly to the results of incessant thought, and wrong, uncontrolled emotions about them." It is hardly necessary to add that many physicians, especially old grannies and gynæcologists, honestly, but most erroneously encourage this morbid sensitiveness about the sexual organs. Of course any manifest disease of them should be removed; and if the patient's mind is satisfied, she will doubtless recover; but only too frequently that "obscure disease of the brain, mind, and nervous system, which underlies and causes hysteria will remain." The really nervous patient will not be cheated of her privileges so easily, even if her uterus has been poked at and painted many times.

Aitkin regards hysteria as a complex, unnatural condition of all the cerebral functions of a chronic kind, probably associated with some morbid state of the emotional or sensori-motor centres (possibly seated in the corpora striata), and presenting many varieties of alteration, so that the phenomena of hysteria may simulate or mimic the symptoms of almost every other disease, &c.

Another plausible theory of the origin of hysteria is that of Nasse, viz: that this affection springs from a nutritive derangement of the general nervous system, both in the brain, spine and peripheral and ganglionic nerves. Niemeyer says: "In this protean malady, derangement of the sensory, motor and psychical functions is nearly always combined with disorder of the circulatory and nutritive systems. Sometimes one set of symptoms predominates; sometimes another; and there is often an exalted excitability in one part of the nervous system, expressed in the form of hyperæsthesia or spasm, and which is complicated with interrupted irritability of some other region, as evinced by anæsthesia and paralysis. Hysteria, according to this view, is a disorder of any or every part of the nervous system, which may originate in the nerves of many other organs than the genitals.

Natural or unnatural irritation of the genitals undoubtedly causes hysteria in some cases; but we agree with those who think

it both narrow-minded and unjust to ascribe all cases of hysteria to over-excited sexual appetite, or its unnatural gratification. We do not believe that all the hysterical girls, old maids or grass-widows are suffering from suppressed sexual passion, or from gratifying it in illegitimate manners. Like Niemeyer, I agree almost entirely with Nasse in his delicate and excellent description of hysteria, in which he says that the frequency with which hysteria occurs in childless women, young widows and old maids, s more attributable to mental distress than to physical influences.

Just as most uterine diseases of the severest form do not produce hysteria, so Niemeyer says the same of ovarian diseases, viz: that the lesser varieties are more productive of hysteria than the greater. Thus dermoid ovarian cysts of moderate size, and even mere morbid sensibility of the ovaries, cause hysteria much oftener than do very large sacs resulting from cystoid growths. It seems that the very magnitude of an important disease is antagonistic to the weak, frivolous and unreasonable behavior which prevails in hysteria.

After it had been satisfactorily proven that all cases of hysteria could not arise from disease of the uterus, the ovaries were seized upon, as they were more out of sight. Schultzenberger drew attention to them and gives cases where pressure upon these organs, which might or might not be sensitive, would cause all the symptoms of an hysteric fit, with globus hystericus, etc. Charcot did the same and gives preference to the *left* ovary, while Skey inclines to the *right* as most productive of hysteria. But Bence Jones far more broadly regards it as a disorder of the *reflex excitability*, and as much a bodily disease as tetanus or chorea, which ought to have its cure attempted by remedies addressed to the deranged nerves and centres; for it often arises from some severe strain or exhaustion of the general nervous system in persons who are thoroughly pure and honest, and have no morbid craving for sympathy or deceit.

Lobb views hysteria as essentially an affection of the nervous system, and pre-eminently of the sympathetic, *i. e.*, a partial paralysis of the nervous system, with a want of balance among its centres. Thus, instead of the nerve force being normally and duly distributed among them, some centres get a much larger supply, and others are deserted or paralyzed. It appears to him

that the nervous influence is often monopolized by some centres, to the detriment of others; and that there is a want of normal equilibrium in the reflex centres of the excito-motor system of the spinal cord and brain, one being in a state of high tension, while the cerebrum, or proper centre of reason and will, is torpid.

Skey considers hysteria as the product of a disturbed, but not absolutely diseased condition of the spinal cord alone. But it is difficult to deny the relation of hysteric affections to a debilitated or perverted mind, which appears to exercise such a mysterious or occult influence over them.

Jolly's summary is, that some cases of hysteria arise,

First. From an augmented irritability of the sensor-centres of the brain.

Second. That other cases, especially the hysterical hyperæsthesias and reflex spasms, spring from a condition of increased irritability of the sensitive portions of the spinal marrow; and

Thirdly. That another set of cases grow out of an increased irritability of the peripheral nerves,—whether these be located in the skin, muscles, bones, joints, or some important internal organ like the uterus, ovaries, kidneys, liver, stomach, bowels, or even the pancreas or spleen.

J. Russell Reynolds and others sum up by saying: "There is in all hysterical subjects a defective or perverted *will;* an increased activity of emotion, and sometimes of thought; an altered or augmented general sensibility; an exaggeration of all forms of involuntary motility; and curious ideational, emotional and sensational perversions, usually attended with some distinct alteration of the physical health.

The disease has finally and unalterably been located in the brain and nervous system, but is well known to be aggravated and aroused by every form of irritation, pain, discomfort, or actual disease arising in any part of the body."

It is scarcely necessary to add that the symptoms of any real disease are augmented a thousand fold by the presence of accompanying hysteria, and the careful physician must constantly be on his guard not to overlook important organic disorder amidst the thronging crowd of curious and distressing symptoms which inevitably attend this protean conglomerate of anomalous phenomena.

Some impertinent persons have divided hysterical subjects into

the honest and dishonest; the obstinate and fickle; the irrational and the theatrical.

Bence Jones pays a high compliment to the honest class; he says: "Call them, if you please, weak-nerved, enfeebled, hyperæsthetic or neurolytic, or anything which implies that solely their physical mechanism, even of the brain, is failing and out of gear; but, cast no suspicion on their immaterial part—perhaps braver and stronger than your own, which may never have been tried as theirs has." No doubt there are many cases of a mixed kind, where, together with real nerve debility and distress, there is more or less of mental infirmity, disposing the sufferers to exaggerate, or to make the most of their maladies. If, however, no proof of imposition can be discovered, and if the history of the patient shows that she has had much wear and tear of the nervous system, we should be slow to put her down as foolishly hysteric, because she has the classical symptoms more or less markedly. He speaks from self-condemning recollections of patients whose complaints he had got weary of hearing, and whom he had come to set down as inveterate complainers, not to be benefitted by anything; who, yet, after a time have rallied and shown that it was mere physical disorder which depressed them, and that there was no want of honesty, or even of endurance.

If the patient is really anxious to get well, there is fair hope of dealing successfully with her nervous derangements, however complicated they may be. But, if disorders are simulated or grossly exaggerated, moral treatment is required—not medical.

In conclusion, I prefer Dr. Carter's classification, in which, 1st. The involuntary attacks are based upon long continued grief, sorrow and disappointment, and finally culminate after some mental or moral disturbance, either violent or merely unexpected, but more commonly after some trivial occurrence, which takes the patient by utter surprise and overcomes the last remains of the power of restraint, and brings to light some ill-understood, but long concealed annoyance and distress. It is needless to add that these cases require the wisest sympathy of the true and kind physician; and the most careful moral and medical treatment. Strenuous efforts must be made to develop the faculty of self-control, while proper palliatives and curatives in the shape of nerve-tonics and sedatives are freely used. Kindness and firm-

ness are all essential, for the patient is fully justified in resenting either harshness and levity. She is a creature of many trials and sorrows, and must be treated with tenderness and respect, while steadily guided to recognize her own exaggerated fears.

Dr. Carter's second class, consists of those who reproduce their paroxysms by the too vivid recollection and dread of previous attacks, and all the association of terrible ideas which attended them. These must be combatted by still more firmness and plainness of advice, without loss of patience or true kindness.

The third class of seizures are deliberately provoked or gotten up by the patients. Sousing them with cold water; cramming salt in their mouths; heavy shocks of the galvanic battery, &c., are all in order; or, even the delightful so-called *infusum benedictum*, composed of a weak infusion of tobacco, with epsom salts. Bence Jones goes so far as to say that a sound whipping or spanking will do them more good than all the drugs in the pharmacopœia.

Prout and Watson are very severe on the dishonest hysterical tribe, in which the utmost duplicity and cunning will often be displayed, where from mere appearances we should expect nothing but the most rigid truth—in short, the whole energies of these patients seem bent on deception. Their innate desire being to become an object of attention; if they fail to accomplish this in pleasant ways, they fall back on the endeavor to excite commiseration. The deceptive appearances displayed in the bodily functions and sensations find their counterpart in the mental: the patients are deceitful, perverse and obstinate, practising or attempting to practise the most aimless and unnatural impositions.

Treatment.—Niemeyer says he accidentally hit upon a nervine of great efficacy in hysteria, and has made use of it with signal effect in many cases in which there were no indications for the local treatment of uterine disease, or where the hysteric symptoms persisted although the local uterine affection had been cured, viz: the *chloride of gold and sodium*. He has used it for several years and in a great number of cases, and was so encouraged by his success, as to recommend it strongly to his pupils. It is well known to be a special re-agent upon the nerve tissues, much used in microscopical investigations. He prescribes five

grains, made into forty pills, with one drachm of gum tragacanth and a sufficient quantity of sugar; commencing with one pill after each meal, gradually increased, until eight are taken per day. But Dierbach, one of the best of the German writers on the *Materia Medica*, called attention to it, over forty years ago. He describes it as exerting a most cheering influence upon the mind, and useful in many cases of debility, and even marasmus. It is said to excite the activities of the skin and kidneys, producing profuse and bad smelling perspiration, and discharges of urine, and an equally tonic and alterative effect upon the genital organs. As early as A. D., 980, Avicenna recommended it in various nervous affections, such as melancholia, hysteria, palpitations, asthmatic affections, &c. It was also used largely in the middle ages, by Raimond, Lull, Basil Valentine and Paracelsus; also by John Hartmann, the first professor of chemistry in Germany, Mynsicht and others. Finally, it was quacked with so much in the shape of so-called gold-pills, made of brick dust and madder, that its use was abandoned by reputable physicians. But Dr. Vogt says, after it has been taken for six or twelve days, in small doses, it will improve the appetite and general appearance; also, arouse more strength and activity in all the functions, especially in the brain and nervous system, causing greater cheerfulness and endurance. He recommends it in melancholia and hysteria. I have used it for thirty-five years, and am much pleased with it. Hahnemann got all his indications for its use from the above authorities.

Cajeput oil is a highly diffusible stimulant and antispasmodic, largely used in hysteria, flatulent colic, nervous vomiting, nervous dysphagia and nervous headaches. It is often rubbed on the back, stomach and head in these affections, as well as given internally, and with considerable success.

Cannabis indica is largely relied upon in hysteria when coupled with exhausting menorrhagia and complicated with neuralgic headache, chorea, &c. I use it very frequently, and can recommend it.

Chamomile oil is an antidote to strychnia; it lowers reflex excitability in a remarkable manner; even that artificially excited by strychnia and brucia cannot only be calmed in a marked degree by it, but an animal fortified by this oil is not capable, according

to Binz and Grisar, of being tetanized by a dose of strychnia which throws an unprotected frog of similar size into the characteristic spasms. It has been used successfully in hysterical cough; in spasmodic and pseudo-neuralgic affections of hysterical persons; in pseudo-angina pectoris, and the colicky pains to which such persons are subject, and in hysterical pains in the fifth nerve.

Cocculus indicus, according to Phillips, is the great rival of nux vomica in nervous vomitings, when attended with a dull and heavy pain in the head, and intolerance of light and sound. Vomitings of this class are at times severe and persistent; at others there are alternations of constant nausea, with violent, but ineffectual efforts to vomit. The stomach is often so exceedingly irritable that no description of food can be tolerated. Phillips says it seldom fails to give the relief so much desired, especially when the head is the part primarily affected, in patients who become nauseated from every disagreeable mental or moral emotion. It relieves the head first, and those of the stomach are soon after allayed. It also relieves the giddiness produced by derangement of the stomach; likewise the dyspepsia and constipation of nervous and hysterical subjects, especially when there is pain, nausea, giddiness and headache, with a feeling of hunger, attended with a repugnance to food, and when the colon is distended with a flatus, and the evacuations more or less hard and lumpy. Phillips says cocculus is often of singular efficacy in many of these cases. Also in tympanites, colic and other spasmodic affections of the stomach and bowels; in the nausea and colic of pregnancy; in dysmenorrhœa, and other painful affections of the uterus. It also rivals strychnia in the treatment of various forms of paralysis and paralytic stiffness of the limbs, with a loss of motor power in the legs, with giddiness and a feeling of lightness in the head. Phillips saw a patient recover in the course of a few weeks who had suffered for several months with loss of power in the legs—moving them with considerable difficulty, and who became giddy, nauseated and light-headed when he attempted to stand erect. He has seen well-marked cases of hysterical paralysis, hysteric hemiplegia, choreic hemiplegia and epileptic hemiplegia successfully treated with cocculus, when the sensibility and muscular power were both much impaired.

Reil used it in paralysis of the sphincters; while Tschudi and Gubler resorted to *picrotoxine*, the active principle, in paralysis of the limbs and sphincters. The dose of the latter is about one-eighth to one-sixth of a grain. Picrotoxine acts on the motor centres, the vagus centres, and the centres for restraint of reflex movements; thus, convulsions can be excited by it in animals from which the brain has been removed. There is a general resemblance in its action to that of strychnine; for fish, under its influence, make twisting and boring movements; frogs get convulsions, or have semi-circular swimming movements winding up with spasms, or singular movements of the hind legs. Sometimes tonic and clonic spasms alternate in the most singular but definite way, with swimming backwards and forwards, rolling over on the axis of the body, &c., &c. I have used cocculus for over thirty years, and frequently depend upon it and picrotoxine.

Ignatia has four times as much strychnia as nux vomica in it, and is, of course, a more powerful remedy. It is useful in many cases of hysteria, hypochondriasis and various nervous affections. Phillips says its good effects are considerable in globus hystericus, paralysis of the œsophagus, nervous aphonia, intercostal neuralgia, clavus hystericus, nervous hiccough, flatulent distension of the bowels, and especially in the convulsive bursts of crying and laughing and the general hyperæsthesia which attends hysteria. He claims to have rendered many hysterical cases much milder, and to have greatly prolonged the intervals between the attacks by the systematic use of two to five drops, or more, of the tincture several times a day. It is also claimed to rival gold in the treatment of melancholia, hypochondria, great mental depression, &c., and I can recommend it very highly.

Lavender oil is said to be more useful and agreeable in hysteria, nervous headache, hypochondriasis, and flatulence than assafœtida.

Orange-peel oil was used by Imbert Gourbeyre for hysterical and other nervous affections, although he states that those who are exposed to its fumes long, are apt to be troubled with headache, dizziness, tinnitus, deafness, neuralgia, oppressed breathing, constriction of the throat, nausea, pyrosis, bad dreams, cramps and twitchings of the muscles, and occasional convulsions. It is probably more useful in paralytic than in spasmodic cases.

Sumbul is said by Phillips to be a remedy for neuralgia of a certain type of more value than any other known drug. He says it is surprising to note the rapidity with which severe facial, sciatic, or ovarian neuralgia will yield to a few doses of sumbul, after resisting very powerful remedies. I have used it for ten years, more in nervous debility and dyspepsia than in neuralgia. It is a most admirable tonic and calmative.

ART. II.—*Carbolic Acid in Eye Surgery.* By JULIAN J. CHISOLM, M. D., Professor of Eye and Ear Diseases in the University of Maryland; Surgeon in Charge of the Baltimore Eye and Ear Institute, etc. (Read before the Baltimore Medical and Surgical Society, Nov. 1st, 1877.)

The rapid growth of carbolic acid in professional favor has been excelled by very few of the articles of the pharmacopœia. From its very introduction in surgical practice, only a few years since, its virtues commenced to be extolled, and its reputation for good has increased apace with its more extended use, until now it holds a position with opium and chloroform—the tripod of surgical remedies. Some surgeons have attained great professional reputation by surrounding themselves and their works by an atmosphere of carbolic acid, and no surgeon is now considered faithful to his trust who omits this remedy in the daily dressings of his wounded patient.

From its recognized surgical worth it has insinuated itself into the good opinion of the physician, who freely seeks its aid in combating many of the troubles which his every-day experience brings under his observation. The restraining influences which this drug exhibits towards inflammatory processes, its activity in cleansing foul surfaces and destroying exuberant growths, its stimulating, deterging and cauterizing, with anæsthetic, properties, give it a very wide field in surgical practice. Its usefulness in general surgery would naturally have suggested its application in special practice, so that the many virtues which caebolic acid exhibits as a remedial agent receive full recognition at the hands of the aurist, the laryngoscopist and the gynæcologist.

In eye surgery, its adoption has been much more tardily in

duced, possibly from its supposed destructive properties, which have been more theorized upon than practically observed. Because carbolic acid smarts the fingers when the fluid accidentally gets upon the sensitive skin, and this to a greater degree than the so-called destructive caustics, even nitric acid, the inference is drawn that its application to so sensitive an organ as the eye can only be followed by the most dangerous symptoms. Yet, my own experience has taught me that of all the caustic applications used in eye surgery, carbolic acid is one of the most manageable and the least severe. That it will smart in a most pungent manner when brought in contact with any sensitive surface, a single auto-experiment will effectually prove. The only surprise will be in the very transient nature and the extremely rapid subsidence of the pain. For in less than sixty seconds the pungency will have all disappeared, which can not be said of any other potent remedy when applied to the eye. We should have expected this, however, from the well known anæsthetic properties of the drug—its temporary pungency giving place to a more protracted loss of sensation in the part to which it has been applied. This peculiarity has been taken advantage of by the surgeon, who paints a line with carbolic acid upon the skin covering an abscess, at the point where he proposes to effect an opening, and the incision can then be painlessly made.

My first experience of carbolic acid in eye surgery dates back four years, when I made bold to apply it to a diseased conjunctiva under the following circumstances:

Mr. S., when traveling in Europe, consulted an oculist of note in Paris concerning a chronic inflammation of one of his eyes, accompanied by a white local deposit upon the conjunctiva, near the cornea, which was annoyingly conspicuous. At first the milder astringents, and afterwards the more severe caustics, were used with no permanent benefit. Alum, blue stone and nitrate of silver would cause a temporary removal of the deposit, but it would as invariably return. In London, special professional advice was also sought, but no cure effected. Upon the return of the gentleman to Baltimore, he came under my observation. He had been now annoyed with the eye disease for more than 12 months—the white spot showing a slight tendency to spread. I found it located between the external canthus and the edge of the cornea, covering a space of two lines in diameter, and was of conspicuous whiteness. To the naked eye, the surface seemed

mottled, and, aided by a five-inch magnifying lens, it appeared honey-combed. Upon scraping the surface, white scales could be detached, which the microscope showed to be epithelial in character. From the extreme whiteness, the sharp definition, and the readiness with which the white mass returned when scratched off, I expected to find some form of vegetable growth similar to the aspergillus found at times filling the external aural meatus. The eye was kept in an irritable condition by the deposit. In treatment, I commenced by applying the usual astringents, and finally the caustics, with the same negative results as he had heretofore experienced. I then tried calomel powder, and afterwards painted the affected parts with spirits of turpentine, but with no benefit. I then determined to apply with caution, by means of a delicate camel's hair brush, the liquified carbolic acid crystal. The moment it touched the surface, it seemed to coagulate the albumen of the tissues, making a large white spot upon that portion of the conjunctival surface over which it had spread. For a short time, a very lively pungency was complained of, but the discomfort very soon passed away. A few days after the first application of the acid, a very decided shrinkage in the size of the spot indicated the controlling influence of the application, and a second painting of the surface with the pure carbolic acid in full strength brought about a permanent disappearance of the disease. As the fruit of this happy suggestion, the patient boasted that he had been cured in a few days of a chronic disease at his home in Baltimore, which had baffled the skill of the distinguished specialists of London and Paris.

Among the many thousands of eye disease patients who have consulted me during the past four years—for I average 2,000 new patients every year—I have met with but one similar case of this peculiar form of conjunctival disease. This one also yielded promptly to the carbolic acid application.

The next class of diseases for the cure of which I have found carbolic acid applications the best of remedies, is well illustrated by the following case:

Mr. G., a gentleman 45 years of age, had been for some time much annoyed by the presence of a number of small, papillomatous warts which had made their appearance on the free margin of the left lower lid for one-third its length from the external canthus. Beside the disfigurement, which was a just subject for complaint, they had long kept the eye in a constant state of irritation. I commenced the treatment for their removal by rubbing on nitrate of silver, with no benefit. I then made frequent

applications of chromic acid with no better results. Finally, carbolic acid came up in its turn for trial. I thoroughly painted the affected border of the lid with the pure liquid acid. The patient visited me for inspection in four days, when I found to my surprise that this one single application had removed every asperity, leaving the lid perfectly smooth, and the case cured.

For the past three years, carbolic acid has been, with me, the sovereign remedy for all warty formations about the eye lids.

The next class of cases in which I tested the curative powers of the acid, was in that terribly and annoyingly protracted disease called granular lids. In a young man, aged 18, suffering from an obstinate form of trachoma, in which the usual treatment by blue stone and nitrate of silver were altogether ineffectual, I everted the lid and thoroughly painted with carbolic acid the entire granular surfaces. I immediately washed the lids freely with cold water to remove any excess of free acid before they were turned downwards upon the eye ball. The application, for a moment, was very severe, not more so, however, than from any other caustic. In less than three minutes all pain had passed off—a very different condition from that following the application of the nitrate of silver or the bluestone, in which the pain would last for hours. In this case, a wonderful improvement was effected in forty-eight hours; and a renewal of the application twice a week cured the patient in a very short time. I have since frequently used carbolic acid in cases of granular lids with excellent results.

Still another form of obstinate eye disease, in which I have often had occasion to strengthen the efficacy of carbolic acid application, is in cases of episcleritis, or sub-conjunctival deposits, a broad, thick, red, tubercular elevation under the front covering of the eye ball, usually between the corneal rim and the canthus, accompanied by an ugly injection of vessels, and an irritability of the organ. Such chronic inflammations usually linger for weeks and even months, to the serious annoyance of both patient and surgeon. A few applications of carbolic acid to the reddened surface has proved in my hands a most valuable solvent to these cell growths, which seem to melt away rapidly under the stimulating influence of the acid, and this without any destruction of surface.

I have also applied carbolic acid with good results to those forms of chronic epithelial thickening of the corneal surface, which develop whitish hillocks upon the transparent structure, irregular opaque thickenings upon the anterior surface of the eye ball, accompanied by chronic congestion of the conjunctiva, with the presence of enlarged vessels. The application of the pure acid once a week to these cloudy portions of the cornea, has stopped the development, and caused a retrograde movement.

From the secondary anæsthetic effects of local applications of carbolic acid, I find comparatively little injection following the painting of even so sensitive a surface as the cornea, and no subsequent pain after the immediate smarting has passed off. Sloughing of the surface, however superficial, I have never seen, even after a liberal application.

In the cases above enumerated—of warts upon the lids, episcleral thickening, epithelial growths upon the surface of the cornea, and granulated lids—I can commend carbolic acid applications, both as an efficient agent in correcting the pathological condition, and an innocent one, inducing no injury of any kind to the delicate tissues of so sensitive an organ. In marginal ulcers of the hair follicles, we would expect the same beneficial results that so constantly follow the application of carbolic acid to cutaneous ulcers.

In the treatment of catarrhal ophthalmia with muco-purulent discharges from the conjunctival surface, I have seen no marked benefit ensue from combining carbolic acid with the usual astringent remedies, and am now satisfied with the zinc or alum lotion, having dropped the carbolic element from such collyria.

ART. III.—*Intra-Uterine Injections of Ergot to Arrest Post Partum Hæmorrhage.* By E. F. ASHE, M. D., Wadesboro, N. C.

Among the many modes of procedure recommended for *post partum* hæmorrhage, I have not seen one application mentioned which I have been using in my practice for twelve years. I refer to intra-uterine injections of ergot, in the following man-

ner: Remove coagula; then with a Davidson syringe wash out all blood with cold water, and quickly inject into the cavity ℥ss Squibb's fluid extract of ergot, with water ℥iv. The effect has invariably been to bring on promptly strong, permanent tonic contraction of the muscular fibres of the uterus.

I have mentioned the treatment to several physicians, who have expressed themselves much pleased with its efficiency. My partner, Dr. Strudwick, has tried it in six cases of hæmorrhage, and says it surpasses Monsel's styptic. Hæmorrhage after labor is very common in this section of this State, which I ascribe to a general cachexia or habit of defibrinated blood, due to the wide-spread malarial influence, and also to excessive snuff dipping among females.

I have never been disappointed in ergot thus applied, and confidently recommend its use to those who have never tried it. Its superiority over the iron treatment must be obvious to any intelligent practitioner, since the latter application is often followed by serious consequences, and is never used without grave apprehensions of serious results, whereas the ergot is perfectly harmless and unirritating.

Some medical critic, having more theoretical than practical information, may say, the result obtained in my practice should be ascribed to removal of coagula and cold injections, &c., but such is not the case, since I was first induced to make the application after trying all those measures repeatedly—with ergot by mouth and rectum—each time only bringing on slight transient contraction, until ergot was tried, with the *unfailing success which always attends its use when thus applied.*

ART. IV.—*Cinchonidia in Malarial Fever Cases.* By HUGH T. NELSON, M. D., Fine Creek Mills, Va.

Being well aware that the medical profession still looks upon the secondary alkaloids of Peruvian bark with a distrust almost amounting to a total disbelief in their *virtus medendi*, I beg leave to submit a few facts illustrative of the beneficial results which I have obtained from the use of the sulphate of cinchonidia. I hope that the cheapness of this alkaloid in comparison

with the high price of the preparations of quinia, induced by the insufficiency of the supply of the latter article, may be an excuse for trespassing upon your space. The fact of the matter is simply this: that the impoverished condition of the laboring classes in the most malarial sections of our State, combined with the extremely high price of quinine, places what has been heretofore considered as the only *anti-malarial* of much value entirely out of their reach, and it will be a God-send to humanity if it can be shown that cinchonidia—retailed at *one dollar and a quarter an ounce*—is, in the main, as efficacious in the treatment of intermittent and remittent fevers as quinia, for which we now have to pay from *five to six dollars an ounce*.

Case I. Wm. Mosby, white, æt. 12, large for his age, robust and vigorous, came home with a high fever on the evening of *June* 23, after having bathed in an ice pond during the heat of the day.

June 24, 6 *P. M.* Saw patient for the first time; learned he had had no intermission in his fever; tongue heavily coated, and a brownish dry line extending the whole length of the *raphe*: conjunctiva yellowish, and he complains of severe headache and giddiness on attempting to sit up; pulse, 140; temperature, 105.7°. A mercurial had been administered some twelve hours before, but there had as yet been no action from the bowels; so, observing a good deal of tympanites, I gently manipulated the abdomen, following the track of the colon from the right iliac region. In about five minutes there was a copious evacuation, showing the action of the mercurial. This was followed by another evacuation in half an hour. Made the following prescription:

℞. Sweet spts. nitre.....f℥j
White sugar.....℥ss
Water q. s.....f℥iv

M. S. Take a teaspoonful every three hours.

June 25, 7 *A. M.* Patient has had high fever all night; pulse, 135; temperature, 105.2°; tongue a little cleaner; concluded not to wait for intermission, but at once ordered 20 grains of sulphate of cinchonidia, to be divided into four powders, one of which was to be given every three hours.

June 26, 8 *A. M.* Pulse and temperature normal; head symptoms all gone; learned from his parents that there had been no increase in temperature since defervescence first set in, which event was very perceptible to them soon after the second dose of cinchonidia had been administered. Patient well.

Case II.—*June* 28, 2 *P. M.* Saw Wm. Powell, white laborer, æt. 22. Patient said he had high fever all the night before, and all the morning, but felt better now; had been under treatment for chills for some time, and had taken a good deal of quinine, but not for a day or two past. Pulse, 71; temperature, 102.8°; conjunctiva yellowish; tongue furred and red on edges; bowels constipated, and tenderness (not aggravated by deep pressure) over entire lower part of abdomen; skin dry and harsh; nausea and vomiting produced on assuming sitting posture. Gave patient a pill containing calomel, grs. iij; resin of podophyllin, gr. ¼; comp. extract colocynth, grs. iss. At 2.45 P. M. again examined patient; pulse 72, full and compressible; temperature, 105.6°. I divided sixty grains of sulph. of cinchonidia into six powders, and ordered that two of these be given as soon as bowels had been moved, and the other four separately at intervals of six hours.

June 30, 10.15 *A. M.* Pulse, 68; temperature, 100.1°; said he felt very comfortable. The pill had operated three times in the evening of 28th, and he took two of the cinchonidia powders before bed time; took three of the powders on 29th; thought himself free from fever all day; slept comfortable all night, and had taken remaining powder early this morning. Gave patient ten grains more of cinchonidia at 10.30. At 12 M., his pulse was 69; temperature, 100.3°. Saw patient again at 6.30 P. M; pulse, 70; temperature, 101.3.° Ordered thirty grains of cinchonidia, to be made into three powders, of which he was to take one to-night, remaining two to-morrow—one at 5, the other at 10 A. M.

July 2, 5 *P. M.* Patient feels well; thinks himself free from fever; pulse, 72; temperature, 99.1°; skin moist and pleasant; bowels were moved naturally both yesterday and to-day; has more appetite than for weeks past. Made forty grains of cinchonidia into ten powders, and ordered him to take one powder three times a day.

About one week after this, I saw Powell out hunting, and he has since gone to work. How long this slight elevation of temperature, as observed in the evening, kept up, I cannot state, as I never saw him again professionally; but he has never been sick nor lost any time from indisposition since I attended him.

Case III.—*July* 13*th*, *A. M.* Howard S., white, æt. 19, had come to the country to spend the summer, and had been assisting to thresh wheat up to noon on the 11th, when he was taken with a chill. His mother gave him calomel, followed by castor oil, which operated by bed time on same day; she then gave him ten grains of quinine, and ten grains more on the morning of the

12th. He had suffered from violent headache and nausea during the whole of July 12th, and could retain nothing on his stomach, and had had a raging fever all the time, having slept little or none from the access of the chill till I saw him on the 13th. Pulse, 142; temperature, 106.1°; tongue slightly coated; skin dry; conjunctiva injected, and much nauseated on attempting to sit up. Had, however, taken and retained a cup of tea this morning. Gave him, in powdered ice, three grains of oxalate of cerium, and at 12 o'clock gave him thirty grains of sulphate of cinchonidia, which he retained. I then weighed out fifty grains more of the sulphate of cinchonidia, and divided it into five powders, ordering one to be given every four hours.

July 14, 2 *P. M.* Saw patient again; he had taken all the powders, and was sitting up in a chair. Said he felt well, but weak, and had slept well last night. Enjoyed tea and toast for his breakfast, and had just taken a second supply before I saw him. Temperature, 98.9°; pulse, 92; skin very moist. His mother reported great abatement in his fever by sunset of the day before, and thought him entirely free from fever by bed time. I directed him to take four grains of cinchonidia three times a day for several days, and to stay in doors out of the sun. He had no return of fever up to the time of his return home to Petersburg, Va., late in August.

Case IV.—Henry L., white, student of Divinity, æt. 26, has attacks of intermittent fever every summer. Saw patient *Aug.* 29; had had chill, followed by high fever, on 27th, 25th and 23d. *Cold stage* was upon him at time of my visit, though, having broken my instrument, I could not mark temperature, but hands, feet and nose were considerably below normal; bowels constipated; tongue dry and coated; conjunctiva slightly yellowish. As I sat by the bed side, he said that he was getting warmer; the temperature of his extremities rose considerably, and in twenty minutes his pulse (which was 108 when I first saw him) rose to 138. I gave him same pill as used in the case of Powell. Saw patient again at 6.30 P. M. He was up and walking about; his skin felt natural, and pulse, in standing posture, 94; no action as yet from bowels. Directed him to take a fluid ounce of castor oil if bowels had not been moved by bed time. Divided thirty grains of sulphate of cinchonidia into six powders—two to be taken at 6 A. M. to-morrow, if bowels have been moved, the other four at intervals of three hours.

August 30, 9.30 *A. M.* Patient had had several actions from bowels during the night, having taken the oil as directed. He had already taken fifteen grains of cinchonidia; said he felt very comfortable. Ordered him to take the other fifteen grains of

cinchonidia in the manner prescribed, and prescribed thirty grains more to be taken to-morrow as directed for to-day.

August 31, 2.30 *P. M.* Patient has, up to this time, taken fifty grains of cinchonidia. This is his *chill day*, but he has had no sensations of chilliness; pulse normal; skin moist and pleasant. Ordered him to take five grains of cinchonidia twice daily for a week. Up to *September* 8, when I last saw the patient, there has been no return of the fever.

The cases cited above have been selected from a considerable number, because they exhibit such high ranges of temperature, and, at the same time, show the power of cinchonidia in reducing temperature in malarial fevers. I have lately come to the conclusion, moreover, that such large doses of the remedy as prescribed in Case III, are, generally speaking, unnecessary, and now never give more than one and a half times the number of grains that I give of quinia under the same circumstances.

I would conclude by saying that, having observed the effects of this drug to a considerable extent, both in my own practice and that of others, I have never known it fail to produce the desired effects in a single case of uncomplicated intermittent or remittent fever.

Clinical Reports.

A Remarkable Case of Echinococcus—Treated by Pomegranate and Aspiration. By Francis Drude, M. D., Secretary of Board of Health, etc., Quincy, Ill. (Read before the Adams County (Ill.) Medical Society, November 12th, 1877.)

John J., a stone cutter by trade, of German parentage, 44 years of age; has lived in Quincy for the last 22 years. He has been a hard working, sober living man. Having been his family physician since he has lived here, I have frequently seen and attended him for intermittent fever (simple and congestive); particularly during the last six years he was sick every year with some hepatic derangement; sometimes he was much prostrated—almost unable to utter a single word. But it is the last disease which I shall record here—giving in the above merely a brief anamnesis.

On September 1st, I was called to the bedside of John J., and

found him with the following symptoms: He had been sick for nearly two weeks, confined to bed for four days, hoping the disease would pass over without medical assistance, making free use of the celebrated (?) "Dr. Koenig's Hamburger tea and bitters." But the disease increased to such a heighth that he could breathe only with great difficulty—the præcordial oppression being excessive. The scrobiculis cordis showed a marked elevation—was very painful upon the slightest touch. The swelling extended over both hypochondria, but was most visible over the liver region, where the temperature was also the highest. The pain was so intense that a close examination of his liver—the seat of former complaints—was simply impossible. The pain in the hot forehead was dull, sometimes beating; the tongue was covered with a thick whitish coating; his eyes showed unusual fretfulness; his urine was scanty and very highly colored; his alvine discharges were more frequent than common, because of the use of the "Hamburger tea" (consisting of senna leaves and coriander). The temperature of the skin was 110°F.; the pulse hard and 125, but regular. A characteristic symptom was, that during night time he would, at irregular intervals, get quite fainty, and nearly suffocate, with occasional chilly sensations, especially cold feet.

My diagnosis on this first day was bilious fever of a typhoidal type, probably with hydatids in the left lobe of the liver; for to anticipate an abscess of the liver, the pain was neither acute, deep nor severe enough—the liver being only in a state of subinflammation.

The treatment was according to this diagnosis. Externally, the patient was much relieved by occasionally using poultices, liniments of aqua ammonia with fluid extract of belladonna.

As soon as the præcordial oppression abated, and the patient could begin to move his body more freely, being able to lay for some hours on his right side (while in the first week he could only lay on his back), then a very serious and distressing complication made its appearance in the shape of tenesmus, lasting for hours. Upon examination of the anus, two strangulated hæmorrhoidal tumors were showing, while about an inch above, in the rectum, a conglomeration of about six painful and inflamed tumors could be felt. Patient by this time, towards the end of the third week, passed considerable quantities of dark, slimy looking blood, which weakened him to such a degree that he felt very much alarmed; and, at his request, my highly esteemed friend, Dr. Wm. A. Byrd, was called in for consultation. Upon his suggestion, large injections of half an ounce of chlorate of potash, with half an ounce of laudanum, dissolved in

two pints of very warm water, were made, by means of a long, elastic tube—to the great relief of the sufferer. I have omitted to mention that, for some days previous, I had prescribed a morphine solution with hyoscyamus, to be taken whenever pain and weakness became intolerable. The above injections had to be repeated several times, morning and night, before tenesmus and hæmorrhage ceased.

At this time, after I had blistered the patient three times in succession over the liver region, Dr. Byrd examined the place, and insisted upon feeling a certain amount of fluctuation, while I could not discern any other feeling than an indistinct vibration.

At the end of the fourth week of my attendance, the patient becoming daily weaker, and night sweats having set in, we determined on making an aspiration. Dr. Byrd, with his inherent boldness, ran a needle into the parenchyma of the liver (an inch and a half above the umbilicus, and a little to the right), about two inches and a half deep. Two ounces (measured) of a dark fluid were drawn off, which, upon examination, showed plainly the larves of the tænia echinococcus—the echinococcus hominis —whose inactive form as a parasite was first described by Bremser in 1821.

English writers have restricted the term "hydatid" to designate the enveloping cyst, and the term "echinococcus" to signify the contained "entozoon." It has not only been found in the spleen, liver, kidneys, lungs, brain, ovaries, but even in the bones. It is endemic in Iceland. So far, it has been considered incurable. On examination, the inner surface of the hydatid membrane shows a number of delicate white particles—the embryo of the tænia echinococcus.

The shock of the operation of aspiration had weakened the patient considerably; he felt faint and dizzy. He was treated on general principles. The next day, no reaction of an inflammatory character had taken place apparently; and so the case went on without the use of any active treatment for five more days. Then I was called again, and found anasarca well developed; the urine and stools were rather suppressed. I prescribed castor oil (one tablespoonful) and spirits of turpentine (one teaspoonful) every six hours until full operations were obtained; and ordered the preservation of the stools and urine, separately.

What was my astonishment, when, on the next day, I saw in the otherwise copious and clear water five pieces of worms, of the size of an ordinary tape worm segment, with clearly discernible hooks! Even in the stool decayed worm fragments could be

detected. I now made out the case as one of *worm diathesis*—of helminthiasis—and concluded to give the patient the benefit of the remedy which I had used with so much benefit for the last 35 years, viz.: a strong infuso-decoction of cortex radicis granatorum. Of this (I prepared it myself, having a supply of it on hand from H. M. Merrell, of Cincinnati,), I ordered him to take half a teacupful two to three times daily, The effect of this remedy was truly wonderful; it acted as a cathartic, vermifuge and tonic. Large masses of worms in a decayed condition were removed daily; in fact, the whole stool appeared like a conglomeration of wormy masses. This medicine was continued for several days, and in order to assist the resolution of the indurated liver, the following prescription was ordered; R. Calomel, gr. $\frac{1}{3}$; iodide potass., gr. j; Dover's powders, gr. iij. M. A powder to be given morning and night. Over the liver, a salve was prescribed of ungt. althæa ℥ss; ext. fluid belladonna and tinct iodine, $\overline{aa}$ ℥ij, and continued for about two weeks, until the gums were slightly touched, when the powders were discontinued, and nitro-muriatic acid substituted.

I must not forget to mention that the anasarca, which disappeared entirely in two weeks under this treatment, must have been the result of pressure on the vena cava, while that on the vena portarum might have resulted in ascites, and on the ductus choledochus in icterus; but this case was characterized by the absence of either of the two latter diseases.

The patient is now able to walk about, is gaining strength, and has new vigor. When asked of which medicine he derived the most benefit, he was always ready to answer, "From the cooked medicine," meaning the pomegranate; and having learned from old Hufeland and Schœnlein the good old doctrine, the "*indicatio ex juvantibus et nocentibus*," I continued with the decoction for three weeks in succession with the best results.

He now receives tonics, and every sixth day a fly blister over the liver region, which place, however small, is yet a little hard and painful upon deep pressure.

Before I close my report of this remarkable and interesting case, I may be permitted to say a few words in regard to the *etiology* of the hydatids and of echinococcus of the liver. The old physiological doctrine of the *generatio æquivoca* appears to me most applicable to the genesis of this disease. When we learn that in Iceland every seventh inhabitant suffers from hydatids of the liver, there must be a cause in the atmosphere and in the diet of these unfortunate people, by which this peculiar

disease is generated. How does it happen that, particularly in the bottom lands, even the swine are afflicted with this disease in such a degree that you can scarcely find a healthy liver where hogs are slaughtered? The so-called "tad pole theory" seems to me the simplest and most plausible; while it appears to me ridiculous, if not absurd, to assume that because dogs, particularly hunting dogs, are most afflicted with worms, the communication with dogs might give it to man. "Analogous homogeneous elements will produce and generate analogous products."

Finally, the *dark color* of the tapped hydatid, in my case, needs an explanation. While the fluid in the tumor is originally colorless and clear, it would, by the sub-inflammatory state of the liver, have changed in its elements, and would have doubtless become pus, if favored by genuine hepatitis.

The *aspiration* in itself, of course, did not afford a radical cure, but it assisted materially in the treatment.

Morphia-Poisoning—Patient, aged Four Years, Relieved by Belladonna and Electricity. By T. CHALMERS DOW, M. D., Professor of Gynæcology and Diseases of Children in Nashville Medical College, Tennessee.

On the morning of September 25th, 1877, a prescription was ordered of 24 grains sulphate of quinia made into eight pills. Dose, one pill every four hours. Instead of the quinine, sulphate of morphia was substituted by mistake.

The patient was a delicate little girl, a daughter of Mr. W. T. Cannon, of Marengo county, Ala. She was four years of age, and had been quite sick for more than a week with remittent fever and its attendant evils—depression, nausea, lack of appetite, etc.

The first pill was given at 10 A. M., while the family physician was present. He then left for his home, distant some six miles, but, on nearly reaching his home, was overtaken by Mr. Cannon, who told him he feared his child had taken morphia instead of quinine. The Doctor hastily returned and found all the symptoms of narcotism present. The pill contained 3 grains Powers & Weightman's sulphate of morphia. It began to manifest its presence in ten minutes after being taken. Mrs. C., with great presence of mind, at once suspected the mistake, sent for her near neighbors, and commenced to give large draughts

of strong coffee, had the child kept walking, and maintained flagellation on the back with a wet towel; these means were kept up after the doctor arrived, but afforded no relief. The patient was kept on her feet by main force—all voluntary motion being lost, the feet dragging over the floor, and articulation almost indistinct.

I was summoned about 2 P. M. Not knowing the nature of the case, I was unprepared with atropia or belladonna, and valuable time was lost in trying to procure this agent, the nearest drug store being miles away. I continued the use of the coffee by imbibition, also *per enema*, and gave repeated hypodermic injections in arms and inner surfaces of thighs. The breathing becoming stertorous, and lungs congested, I applied sinapisms over the chest and back. The respirations steadily decreased, going down to nine to the minute. The change in the facial expression was most marked, haggard, anxious and the pin point pupil. Had stimulating broths made and given at intervals. About 8 P. M., the change was more marked for the worse. At this time a reliable article of tincture of belladonna was procured; a hypodermic injection of 10 minims was given. No effect being appreciable at the end of an hour, 15 minims were given. In thirty minutes, the long desired dilatation of the pupils was initiated. An additional injection of 20 minims was administered. When her inspirations were at their lowest number, and the lungs seemed most overloaded, I resorted to powerful currents of inductive electricity, applied along the spine and course of the par-vagum. This created much excitement, and increased the respiratory act six or seven times in the minute. The instrument used was the imported one of Gaiffe, of Paris.

About midnight, the influence of the belladonna was fully established; 45 minims had been given; the breathing had improved—now being 20; the urine was drawn off, and the little patient left undisturbed for half an hour's rest. At 6 A. M., all danger seemed in abeyance, and improvement, though slow, was well marked. A troublesome symptom, however, developed itself, in the most obstinate constipation. This was overcome by a mixture of calomel, gamboge and jalap.

The mistake in this case of substituting morphia for quinine, has become a common one. The salts were in a case in drachm vials, side by side, the labels were shaped and looked alike, and the morphia was dispensed in the hurry of the moment. Is it not time that all poisons were kept, as has been proposed, in glass of a certain color? In the South, where such large quantities of morphia and quinine are used, this is especially needful.

A few months since, the writer was asked by a lady friend to dose some quinine for her children, from a package she held in her hand. Although in haste, the salt was scrutinized, the test for morphia made, its presence found, and a dreadful error happily averted.

Case of Intestinal Hæmorrhage in a Child One Day Old—Fatal.
W. E. Taylor, M. D., Medical Inspector U. S. Navy, Mare Island, California.

[We make the following extract from a private letter because the class of cases referred to is rare, and interesting.—Ed.]

I saw, a few days ago, a case of hæmorrhage from the bowels in a child, male, only 24 hours old. The grandmother had officiated at the birth, which seemed to have been all right. It had had two copious, tarry passages before I saw it. I was informed that the first two actions were normal; then came these two which alarmed the relatives. The child looked robust enough. Upon examining it, I found the diaper filled with a discharge of tarry color and consistency—the child being in the act of having a third discharge. I hardly knew what to do, but gave it plumbi acetatis, and advised quiet and warmth, &c. I was informed the next day that the discharges continued, and increased in frequency—the child having had 18 in all before death, which occurred the following day after I saw it, and about 24 hours from the first bloody stool.

I don't know whether the child was rudely handled, or whether it was an exaggeration of a normal intestinal congestion, acting upon vessels weakened from some unknown cause. Both parents seem healthy, and this was the second child. As such cases are rare, I thought I would mention it.

Correspondence.

Blood-letting in Puerperal Convulsions.

Mr. Editor,—In your October number, 1877, there is an article by Dr. H. T. Bahnsen, of Salem, N. C., on *Puerperal Convulsions*, which so forcibly strikes, what seems to me to be, the key-note in the treatment of such cases, that I feel it to be my duty to support him. The profession has gone too far in ab-

staining from the use of the lancet; in the recoil from one excess, we have vibrated to another. It may be that the nihilism of homœopathy has unduly influenced us either directly, or through public sentiment indirectly, until to bleed nowadays requires much boldness and self-reliance This influence has become damaging—and, if the cause of deaths, criminal.

I reported to you a case of post partum puerperal convulsions a year ago, in which I bled, and recovery took place. I wish now to report in brief a case that occurred here on October 26th.

Was called in consultation to a young primipara, white, Irish, at 9 o'clock at night; she was about eight months pregnant. On going in the room, being informed by the husband of the nature of the case before arriving, I found the medical attendant, Dr. C. J. Clark, holding the patient's arm over a bowl, and a small stream of blood flowing. I told him to go on, and that I would watch the pulse. He informed me that he had bled her before my arrival about a pint and a half, and he had closed up the vein; but another convulsion had come on, the bandage had become loosened, and she was bleeding thus when I arrived. I urged him, even against his judgment, to let the blood flow, until some sensible effect was produced. The pulse became wavering presently, and I agreed to stop the flow. She must have lost in all over fifty ounces. An enema which had been given to relieve the bowels now acted; then we gave forty grains of chloral in milk and water by enema, but as the peristalsis was still persisting, most of the chloral solution was soon discharged. In about half an hour, we gave thirty grains more of chloral by enema; this was retained. We then gave chloroform by inhalation. Only two convulsions occurred after the resort to bleeding and chloral; six before; eight in all. By this course the convulsions were relieved. This woman remained in this dozed condition—state of partial stupor—without convulsions—intelligent enough to respond to orders and the wants of nature—from 12 o'clock at night, until about 9 o'clock next night, when labor set in. The child presented by the feet, was delivered without difficulty, but was dead. The mother recovered promptly. It is probable that the child was killed by the convulsive force of the mother.

In reporting this case to the Selma Medical Society at its last session, some discussion arose. Dr. J. H. Williamson, who practised medicine for many years in the lower end of this county, stated that he had met in his own practice only six cases of con-

vulsions, some ante- and some post-partum; that he had bled all of these patients, and that all the mothers recovered.

Dr. Parke incidentally remarked that he knew he had saved a man's life once by copious bleeding. The man had received a heavy blow on the head. When he was called to the case the patient was comatose and breathing stertorously. He bled from the arm, when the stertor gradually ceased; but when he closed up the vein, the stertor re-commenced. The Doctor bled again, when the stertor again stopped, and consciousness returned; the man recovered.

Some believe that puerperal convulsions are due to cerebral anæmia; there may be cases of that type; there may be cases that arise from exhaustion and debility; extremes meet in pathology beyond doubt; these will require opium, Hoffman's anodyne and such like. But I never saw a case of this sort; all the cases I have seen have been sthenic, and the muscular action was powerful and intense. Very respectfully,

BENJAMIN H. RIGGS, M. D.

Selma, Ala., Nov. 14th, 1877.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

The Prevention of Epileptic Paroxysms by the Hypodermic Injection of Apomorphia.—Dr. E. Vallender, (*Berliner Klin. Wochenschrift*, 1877, No. 14) reports three cases of epilepsy, in which he succeeded by hypodermic injections of apomorphia in lessening the violence of the paroxysms and the frequency of their recurrence. The treatment was suggested by a report of Riegel, in which he stated that he had seen a paroxysm cut short in this manner.

The amount injected was "one third of a syringeful of a one per cent. solution." [Bartholow says that one-sixteenth of a grain is sufficient when given hypodermatically to cause vomiting, and he says further that the solution in water will not keep.]

In the first case of Vallender, the attacks often occurred fifteen times in the twenty-four hours, and were preceded by an aura in the region of the stomach. The aura occurred some

moments before the fit. The injection was made as often as possible during the aura. The paroxysms at once became much less violent, and diminished in number so rapidly that after eight weeks there was no evidence of the disease.

In the second case, the aura, a feeling of giddiness, came on a very short time before the fit. It was difficult, therefore, to give the injections at the right time, although the number and severity of the fits were very much lessened by them.

The third case was a woman, who was under treatment but a short time. The aura, which was in the toes, occurred about a quarter of an hour before the fit. In this case, the injection, used at the proper time, prevented the convulsion altogether.

It appears, says Dr. Vallender, that the longer the aura occurs before the convulsion, and the longer, therefore, before the convulsion the apomorphia is given, the more favorable will be the result.

Curare Hypodermically for Epilepsy.—Dr. C. F. Kunze, of Halle, recommends (*Deutsche Ztschr. f. Prakt. Med.*, 1877) the subcutaneous injection of a solution of curare for epilepsy. He uses a solution of one-twelfth part of curare, five parts of water, and two of muriatic acid, and of this he injects eight drops every five or seven days.

Hypodermic Injections of Solutions of Albuminate of Mercury. By Dr. J. Grünfeld, in *Weiner Med. Presse*, No. 35, 36 and 38, 1876. This article, although it appeared a year ago, will, we think, prove interesting. The solution which Grünfeld employed contained one centigramme of albuminate of mercury to the gramme. The injections were made daily, or sometimes every other day, on the sides of the thorax or on the back—from ten to twenty such injections being made in all. As a result of this treatment, there occurred an injection of the skin in the neighborhood of the point of insertion of the needle, and a feeling of discomfort, which in one case amounted to faintness. The severity and duration of these symptoms depended on the length of time the medicine was used, as well as on the strength of the solution. Infiltration and induration of the skin was also observed; this usually reached its height in twenty-four hours, and then stood at one point for a variable length of time. The points of injection and the surrounding parts were always painful—so much so in some instances as to disturb the patients in their business. The duration of the pain was variable (from 6 days to 4 weeks) depending on the condition of the indurated spots. Salivation was never observed in the cases treated in this manner. Grünfeld comes to the following conclusions:

(1) The difficulties in the way of preparing and keeping the

solution of albuminate of mercury are not comparable to those in the way of preparing and keeping the solution of corrosive sublimate.

(2) There was but little pain and no abscesses caused by the use of the albuminate, as commonly occurs when the sublimate is employed.

(3) The local troubles after such injections are not so slight, however, as to make this method of administration preferable to other modes.

(4) The injections of the albuminate are far preferable to similar injections made with corrosive sublimate solutions.

The Treatment of Typhoid Fever by Cold Baths.—By Dr. Féréol. [In the number of this journal for June last, we gave an abstract of a paper read by M. Peter before the Société Médical des Hopitaux, in which he took very decided grounds against the use of cold baths in typhoid fever. At the meeting of the same Society, on the 27th of April last, M. Féréol replied to the paper of M. Peter, and we take the following report of his remarks from *Le Progrès Médical* of September 22d.—W. C. D.]

M. Féréol states in the first place that he does not claim that cold baths are applicable to every case, nor that hyperpyrexia is the only condition indicating their employment. He thinks, on the contrary, that the nervous troubles are more happily influenced by the cold baths than the high temperature itself. There is no doubt, however, that the elevation of temperature is in itself a serious matter. This has been sufficiently shown by the researches of Vallin and Claude Bernard. He agrees with M. Peter in thinking that the high temperature is due to the violence of the disease, and that the violence of the disease is not due to the high temperature; but while this is true, it is equally true that the violence of the disease itself is *increased* by the high temperature; and if the temperature be reduced by appropriate means, the disease runs a simpler course, and the prospects of recovery are much better. Whatever theory be adopted, it is certain that, along with the fall of temperature, there is an improvement in all the other symptoms.

The patient may be occasionally cooled too far, but this is a rare occurrence, and is not always very serious when it occurs. In one instance, the temperature fell to 89.6°F., and no evil consequences of note resulted.

Syncope, which M. Peter has attributed to the use of baths, is sometimes observed when the baths are not used at all; and the same remark holds good with respect to epistaxis, hæmorrhages from the bowels, pulmonary hæmorrhages and albuminuria.

The chief danger to be apprehended from the baths, in M. Féréol's opinion, is broncho-pneumonia, and it is well known that this is a not infrequent complication of typhoid fever, however treated.

With reference to statistics, M. Féréol acknowledges that they *seem* to show that the baths give no better results than the other methods of treatment. But he calls attention to the fact that M. Peter compared the results obtained in *different hospitals*, and not in the same hospital by the different methods of treatment. He states that it is well known that the mortality from typhoid fever in the "Municipal Infirmary" is greater than in the other hospitals; but if the statistics of this hospital alone be examined, it will be found that while, during the first year, when the baths were not used, the mortality was 27 per cent., during the three subsequent years, when baths were employed, it fell to 19 per cent. Furthermore, in examining the cases one by one, he could not find a single instance in which death could fairly be attributed to the use of the cold baths; while, on the contrary, many patients were apparently cured by them who would have died otherwise. M. Féréol states, in conclusion, that he is not a partisan of this mode of treatment, but he is unwilling to deprive himself of it when it often does great good, for the reason that it *may* occasionally do harm.

Indications for Enucleation of the Globe of the Eye.—M. Warlomont read a paper on this subject before the International Medical Congress at Geneva, on the 11th of September last. The following were his conclusions, which we take from *Le Progrès Médical*, of September 29th:

(1) The sympathetic troubles after an injury to the eye are primary or secondary. The first appear a few days after the accident; the other after a variable length of time—some months or perhaps years—after the injured person has passed through all the primary dangers.

(2) When an eye has been destroyed by an injury, and there is no hope of its recovering, with any degree of useful vision, it is highly advisable to remove the ball *at once*. The patient thus escapes the dangers of the injury, such as ophthalmitis, &c., and he is able to return to his work in a few days, in excellent condition to have an artificial eye inserted, which will be entirely harmless. He is, furthermore, preserved in this way from the remote accidents of his injury. When there is reason to believe that the globe contains some foreign body, the indications for enucleation are even more pressing.

(3) When an eye which has been lost in any manner, traumatic or otherwise, or the remains of an eye, becomes the seat

of continuous or intermittent pain or sensitiveness, or when an eye contains a foreign body or a chalky lens acting as a foreign body, enucleation is indicated as a preventive measure, even in the absence of all sympathetic manifestation.

(4) Enucleation of the lost eye is indicated, even if there is no pain or sensitiveness about it, if the second eye become the seat of symptoms attributable to sympathetic trouble.

The Section adopted and gave their sanction to all the conclusions of M. Warlomont, except his statement that the patient would be "in excellent condition to have an artificial eye inserted which will be entirely harmless."

Anæsthetics in Obstetric Practice.—Dr. Frachaud read a paper on this subject before the Section of Obstetrics and Gynæcology of the International Medical Congress on the 11th of September last. The following are his conclusions:

(1) The employment of anæsthetics is to be advised, as a general rule, in natural labor.

(2) The principal agents employed at present are, ether, chloroform, amylene, laudanum, morphine by subcutaneous injection, and chloral by the mouth and by enema.

(3) Chloroform is the one the speaker considered preferable.

(4) It should be administered according to the method of Snow, that is, in small doses at the commencement of each pain; and it should be suspended as soon as the pain had passed.

(5) It should never be pushed to complete insensibility, but a diminution of pain only should be aimed at.

(6) It is generally advised to administer chloroform only during the period of expulsion; but in some cases of extreme nervousness and agitation, it is better not to await the complete dilatation of the os.

(7) Experiment has shown that anæsthetics do not stop either the uterine contractions or those of the abdominal muscles, but that they lessen the resistance of the perineal muscles.

(8) The employment of anæsthetics has no injurious effect on the health of mother or child.

(9) In lessening to a greater or less degree the sufferings of the woman, anæsthetics are of great service to those women who dread the pain; it lessens the probability of their having nervous attacks, and hastens their convalescence.

(10) Anæsthetics are extremely useful to calm the extreme agitation and control excitement which labor often causes in very nervous women.

(11) Their employment is indicated in cases of natural labor, which is suspended or retarded by the sufferings caused by previous disease, or that coming on during the labor, and in cases

where irregular and partial contractions occasion great suffering without advancing the labor.

(12) Chloroform should not be employed in natural labor without the consent of the woman and her friends.

M. Courty spoke in high terms of M. Frachaud's paper, and stated that he agreed with him in every particular.

Proceedings of Societies.

MOBILE (ALA.) MEDICAL SOCIETY.

(Reported by W. D. Bizzell, M. D.)

Sept. 15.—**Bone Discharged through the Ischio-Rectal Fossa.**—Dr. Scales was called to see a gentleman suffering with pain and swelling in the ischio-rectal fossa, which led him to order the application of a poultice. As soon as fluctuation was detected, he opened the abscess by incision, giving exit to a quantity of very offensive pus. In a few days, the patient exhibited a small fragment of the leg bone of a bird which had been discharged through the opening. He thinks that, in all probability, he will have to operate for the fistula that may result, but will wait and see whether it will be demanded.

Cincho-Quinine and Sulphate of Cinchonidia.—Dr. Goode reported that he had tried cincho-quinine in a number of cases recently, and also the sulphate of cinchonidia, and, so far as his experience went, the sulphate of cinchonidia was to be preferred.

Dr. Ketchum said that he had also been making trial, in a large number of cases of the cincho-quinine, on account of the high price of sulphate of quinia. The results were highly satisfactory—the ordinary remittents and intermittents yielding quite as readily when he used cincho-quinine as after the administration of sulphate of quinia.

In response to the question as to whether he had observed a rose-colored rash following the administration, he said that he had observed this to follow only in one instance.

Dr. Ketchum reported a case of

Strangulated Direct Inguinal Hernia—Operation and Recovery. The patient was an old negro woman, upwards of eighty years of age. She was an old family servant, who had formerly nursed the Doctor, but has now lived as a pensioner on his premises for more than twenty years. The Doctor was sick in bed, and did not see the case until the strangulation had existed about five days. At this time, she was vomiting stercoracious

matter; she was exceedingly weak, and in a generally bad condition. Called in Dr. Martin, who operated, and notwithstanding the age of the patient, and the length of time during which the strangulation existed, she made a good recovery, exhibiting no bad symptoms whatever after the operation.

September 29.—**Case of Prolonged Labor.**—Dr. Cochran was called to see a negro woman about 40 years of age, who was supposed to be in labor with her eighth child—the seventh pregnancy dating back about ten years. The patient stated that she did not think she had gone to her full time by two weeks. Dr. C. was called to see her about 11 o'clock at night; he found the womb high up; very little, if any, dilatation. The pains lasted all night, gradually wearing away, and labor seemed to be postponed for awhile. The patient then got up and went about her work for ten days, when she was again seized with labor pains, which lasted all day. During the next night he remained with her. At this time, the mouth of the womb was very high up, and only slightly dilated; the pains were not very urgent, and, altogether, labor seemed to be making very slow progress. Both he and the patient growing weary with waiting, he gave ergot, and attempted dilatation of the os with his fingers—the mouth of the womb being still very high up and rigid. He sent for his long forceps, intending to drag the child through the partially dilated os, but he succeeded only in getting a pair of short forceps. He ruptured the bag of waters, but only a small quantity of fluid drained away, which, in his opinion, accounted for the unusual flatness of the abdomen. He then attempted to apply the short forceps, but did not succeed—the instruments being too short to reach the head of the child and lock. He however continued his endeavors to effect this for a considerable time, till he was perfectly exhausted. He desisted for four, and then returned, accompanied by Dr. Bizzell, who had a pair of Hodge's long forceps, which he tried to introduce, but found it impossible to do so. Dr. Bizzell also made the attempt and failed. After the use of chloroform, which had been given during the attempt at delivery with the forceps, the head gradually commenced to descend. Dr. Bizzell advised, and Dr. C. concurred, to let the case alone, trusting to the efforts of nature to accomplish the delivery. This was about 5 o'clock. Dr. Bizzell left, promising to return at 9 o'clock. At this time, the head had advanced considerably, and at 10.30 P. M., the child was born, dead, without further assistance. At the time the placenta came away, a decidedly bad odor was noticed, both by Dr. C. and Dr. Bizzell. A close examination of the placenta showed that there had been a partial separation of the placenta from the womb

some time before the actual delivery. This separation, he thinks, occurred at the time of the first attempt at labor, resulting most probably, not in the immediate death of the child, but enfeeblement, so that it readily succumbed with the second onset of the pains, and especially from the powerful and prolonged contractions produced by the ergot. While a portion of the placenta was decomposed, the child was firm, and showed no signs of decomposition whatever. The patient, at the time of the delivery, had high fever, which had been developing for six or eight hours previously; was quite stupid, and semi-comatose. The pulse was feeble and very compressible. Dr. C. ordered the patient to have some toddy occasionally during the night, and if she was restless and complained of pain, she was to have two small doses of morphine, which he left.

The prognosis, concurred in by Dr. Bizzell, was unfavorable. Next morning, however, when they saw her together, she was decidedly better, and without any very special treatment, she went on and made a good recovery.

Dr. Smith said he thought the child had probably been dead for some time, two weeks or more, and in this way he accounted for the flatness of the abdomen and the prolonged character of the labor. He could not but think ergot, given in the way Dr. Cochran had mentioned in this case, before the womb was half dilated, was calculated to do far more harm than good.

Dr. Owen said that, so far as he could see from the relation of the case, the pains previous to the attempt at forced dilatation and the administration of the ergot, were false, as in the first instance; and true labor was only induced by the interference of the medical attendant. Had the pains been let alone, in all probability, they would have subsided as in the first instance; as is well known these false pains are quite common during the last weeks of pregnancy. He considered the administration of the ergot wrong at this stage of labor, and unless the immediate emptying of the womb had been imperatively demanded, he should not have attempted to force dilatation and introduce the forceps.

Dr. Cochran said that he gave the ergot on the principle that when a hollow bag is compressed in all directions at once, the contents have a tendency to escape in the direction of least resistance, which direction of course, he considered, would be in the direction of the os.

Dr. Bizzell said that, at the time he saw the woman, she was in this state of partial stupor, and also had very high fever. He made very little effort to introduce the forceps, as the vagina was moist and the pains strong; and after watching the case for a

while, he was satisfied that the woman would be delivered without assistance, as the powers of nature were ample to effect delivery. The mother's parts were already very much tumefied and swollen, as a result of the previous efforts of Dr. Cochran. The result fully justified his expectations. The fever was of a pungent character, the pulse compressible, and the whole physiognomy one of commencing septicæmia, which he believes it was, as a result of the absorption from the decomposition in the placenta. He did not believe the child had been dead so long as Dr. Smith supposed, but was rather disposed to accept Dr. Cochran's explanation.

Analyses, Selections, &c.

Etiology of Endemic Goitre.—Dr. Morrell Mackenzie, Physician to the Hospital for Diseases of the Throat, and lately Physician to the London Hospital, in a very interesting article on this subject, contributed to the London *Medical Examiner*, October 25th, 1877, says:

Briefly reviewing the whole subject, we see that goitre occurs under a great variety of geological conditions, and that it is often associated with lime and chalk. The lime theory of goitre derived great force in this country from the publication of M'Clelland's essay in 1835. His work established in the most complete and conclusive manner that the goitrous poison exists in the potable waters. He showed also that in the valley of Baribice goitre was absent in the clay-slate, but present in the limestone districts. Whilst, however, his statements concerning the limestone attracted general attention, his observations on the presence of metals in the goitrigenous formations were passed over. It is sufficient here to take cognizance of the fact that goitre is entirely unknown over the wide extent of the mountain limestone in Ireland; that it is absent in the cretaceous formations in the east of Kent, although most of the water in the Isle of Thanet contains more lime than the most goitrigenous springs in Derbyshire.

It was at one time thought that goitre was due to the presence of magnesia in the water. This view, first put forward by Gautier in 1794, was subsequently advocated by Inglis, and received great support in a series of able memoirs published by Dr. Grange. Nevertheless, the view must now be given up. The disease is far less prevalent in the magnesian lime districts of England than it is on the carboniferous limestone, the chalk and the weald-

clay. Moreover, not only have waters been found containing magnesia in considerable quantities where goitre is absent, notably by M. Blondeau, at Rhodez, but it has been shown by the Sardinian Commission that many goitrigenous waters in Savoy are entirely free from magnesia, or contain only minute traces of that earth. It will be seen that all the older geological theories fall to the ground, and that we are driven back to the doctrine of Dr. St. Lager, that "endemic goitre coincides with metalliferous earth"—a view which is supported by the investigation of the disease in this country.

The presence of metalliferous earths—especially of copper—in goitrous districts was pointed out by M'Clelland, although *his reference to this fact were entirely overlooked.* He remarks, however, speaking of the valley of the Baribice, Duoygong, "one of the villages supplied with water from clay-slate, has not a single case of the disease; while Agar, only half a mile distant, and containing fifty inhabitants, has no less than forty cases, and of that number twenty are cretins. *They use the water which issues from an old copper mine* in limestone, and which contains carbonate of lime and soda, but no sulphate." (The italics are not in the original.)

Dr. St. Lager has called attention to the coincidence of goitre and metalliferous earths in all parts of the world, and his view receives great support from the study of the geology of goitre in this country. Thus, in all the districts in England and Scotland where goitre is endemic, the metalliferous earths abound. In Derbyshire, on Alston Moor, in Helmsley, at Wanlockhead—the places in England where goitre is most endemic—mining is the occupation of the inhabitants. Does not this circumstance point to the presence of the metalliferous earths in these parts? In all the other parts of England where goitre is endemic iron is found. It is not probable that the poison is so gross a substance as sulphate of iron—the salt to which the disease is attributed by Dr. St. Lager. That physician is not aware that the salt referred to has been long prescribed in this country. I have made inquiries amongst medical men in the habit of using it, and I have not been able to hear of any case of goitre thus artificially produced. Although it has been conclusively shown that the soil in goitrous districts is highly metalliferous, it must be admitted that it has not been proved that the water in these parts is impregnated with any metallic substance; indeed, the very opposite view has been put forward by Dr. Moffat, of Hawarden. In a paper read by that gentleman at the meeting of the British Association in 1873, he attributed goitre to the absence of iron and phosphates. He stated that he had examined

ten wells on the carboniferous limestone in Flintshire, where goitre was endemic, without finding a trace of iron. These observations of Dr. Moffat, controverting, as they do, Dr. St. Lager's theory, are extremely important, and it is to be hoped that further examination of the Flintshire waters will be made with the view of confirming or disproving Dr. Moffat's experiments. Though I have no knowledge of the exact mineralogical character of the carboniferous limestone of Flintshire, I would venture to predict that the metalliferous earths abound there.

The supposed absence of iron and other metallic impurities from goitrigenous waters cannot be regarded as an important matter in cases where these impurities have not been specially sought; for, as a rule in examining water, chemists are in the habit of filtering before making an analysis, and they thus exclude insoluble matters. There are, nevertheless, many insoluble substances which become soluble during the process of digestion, and hence the mode of testing is generally fallacious. Prof. Wanklyn remarks, in his excellent practical treaties on *Water Analysis*, that "chemists are in the habit of neglecting to examine water for the heavy metals, and yet the presence of these metals may reasonably be suspected in many of the sources which have been proposed for the supply of towns, and metallic compounds are very active physiologically. The Cumberland water, for instance, is all of it to be suspected of containing these metals, and examination would doubtless disclose the presence of traces of them." He also adds the following very pertinent observations: "We would point out to the water analyst the desirableness of paying attention to the minute traces of heavy metals present in so many kinds of natural water. From a sanitary point of view, these traces are much more important than the exact determination of the relative amounts of lime, magnesia, silica, alumina, and alkalies in a water residue."

With reference to the disease being due to an absence of certain principles, such as carbonic acid, iodine and the chlorides, Virchow well remarks that "it is hard to believe that an active, indeed an irritative, process (such as occurs in a pathogenesis of a goitre) could be set up through deficiency of any material, instead of being caused, as is much more probable, by the presence of some positive substance; and the desire to discover such a substance will not be abandoned till the cause of the disease is conclusively established." The present state and bearings of the question tend to show, then, that the cause of goitre is some subtle poison prevalent in the water in those districts where the metalliferous earths are present.

There cannot, I think, be a doubt that in certain places the

disease must have acquired great hereditary force. The disease has been perpetuated in parts of Switzerland from generation to generation for nearly eighteen centuries. In many of the valleys the inhabitants of one district have had but little communication with those of another, and marriages of consanguinity must have been exceedingly common. In some of the remote villages of Derbyshire, these same conditions have been, and still are, in operation. I have met with a large number of cases of sporadic goitre where hereditary influences were present; and if these occasional cases were due to heredity, how much more likely is the disease to be intensified by what cattle dealers call "breeding in and out." That heredity is less powerful than the endemic poison, however—notwithstanding the long period through which the former cause of the disease has been operating—is shown by the fact that the disease ceases to be transmitted as soon as individuals leave the goitrous locality. On the other hand, healthy people settling in goitrous districts rapidly acquire goitre, and become the parents of goitrous offspring.

The poison has been traced to the soil; the water has been proved to be the vehicle of the poison. It may be that goitre is due to some metal or salt with which we are already acquainted, and that chemistry or the microscope will enable us to single it out, or it may be that spectrum analysis will bring to light some new substance which is the poison so long sought in vain.

Muriate of Ammonia in Ovarian Tumors.—We have time and again seen this agent recommended in cases of amenorrhœa, and in certain cases of sterility due to want of functional activity of the ovaries, or perhaps of the uterine mucous membrane. But we do not recall seeing anywhere that the muriate of ammonia was previously put to the use indicated in this extract from the *Transactions of the Medical Association of Georgia*, 1877. Here we find that Dr. E. H. W. Hunter, of Louisville, reports two cases of ovarian tumors successfully treated by this agent.

Case I.—*March* 30, 1874. He was called to a negro woman, age 30 years, the mother of one child about 12 years old, and found her screaming with pain in the right side of her abdomen, extending from the groin to the level of the umbilicus. There was, in addition, great tenderness upon touching the painful part. For two years, the patient had been subject to these severe attacks of pain at every catamenial period. These attacks had grown more and more severe, until now they confined her to bed for two weeks. It now required her one week to recuperate;

so that she had but one week out of four in which she was able to do even light work. The pain was seated in a "lump" in her right side. She had been under treatment for the two years, but blisters over the tumor and morphine during the attacks alone, of all the remedies tried, gave her relief. On examination, the Doctor fonnd a tumor about the size of a cocoanut, smooth, very tender to the touch, and evidently ovarian, filling the hypogastric region. The catamenial discharge was painful and scanty. The Doctor prescribed such remedies as were calculated to relieve her present suffering, and, as soon as relieved, dismissed the case.

May 7. Dr. H. was called to see her in another attack, similar to the former one. As soon as the severity of this attack subsided, which was on the 11th, he put her upon twenty grain doses of muriate of ammonia four times a day.

May 31. The Doctor was called to her in another attack, which proved to be her last one. The patient continued the muriate of ammonia about six months. She is now, and has been since the close of 1874, perfectly free from all suffering during her catamenial periods. The flow is normal in quantity, *the tumor has disappeared*, and she has been doing field work for the last two years.

Case II.—Mrs. S , aged about 35 years, mother of six children, had a large lobular tumor (as two distinct seams or divisions could be traced across it), extending above the umbilicus; it was on the left side, but extended across the mesial line into the right side. It had existed several years, and she had been under the treatment of several physicians. Blisters and iodine externally, and mercury and iodine internally, besides other remedies not remembered, had been used without benefit. The weight and position of the tumor had produced a considerable degree of prolapsus uteri, with ulceration and hypertrophy of the cervix. Her general health was very much impaired.

On June 10th, 1874, Dr. H. put her on the same remedy and in the same doses as in the former case (treating the ulcerated cervix at the same time), and continued it with but little intermission until the following April, when, being informed that she was pregnant, he advised its discontinuance. He was called to see her on October 3d, and on the 4th delivered her of a healthy and well developed child. At the time of her confinement, the tumor could be felt above the left groin, about as large as an orange, but was a source of no uneasiness whatever. After the birth of the child, she resumed the use of the ammonia, and continued it several months, but whether or not with the effect of the entire removal of the tumor, I am unable to say, as she

moved out of my neighborhood, and I have not seen or heard from her for a length of time. After using the medicine a few months, her general health improved so much that, on meeting her unexpectedly one day, I did not at first recognize her. Her pale, emaciated face had given place to one that was full and rosy, and her general appearance indicated the enjoyment of fine health, and she said she had not been so well in years. At the time she began to use the ammonia, the tumor had very much the appearance of suppurating, which it did in a few months after, but had entirely healed at the time of her confinement.

I have, since treating these cases, advised the use of the same remedy in the case of the wife of a medical friend, who was suffering from an ovarian tumor. He reports her improved, but not entirely relieved. She is about forty years of age, and was sterile, but since taking the ammonia, she has had two children. The last one is about a month old. Query. Had the ammonia anything to do with curing her sterility?

My experience warrants me in advising its use in all such cases; it is a safe and simple remedy; it is certain to do no harm, and may do good.

Some of the Minor Therapeutic Uses of Salicin.—Dr. T. J. Maclagan, Physician to the Dundee Royal Infirmary, Examiner in Medicine to the University of Aberdeen, etc., says (*Practitioner* for November, 1877):

Salicin is chiefly of service in the treatment of acute rheumatism. Though its major, that is not its sole therapeutic use.

Dr. Thomson, of Peterborough, has recently reported most favorably of its curative action in intermittent fever, one of the ailments for which it was recommended nearly half a century ago.

The object of the present paper is to give my experience of its use in the treatment of one or two other very common ailments.

Neuralgia.—The cases of neuralgia in which I have found salicin of most service, are those in which the pain comes in periodic exacerbations, and in which quinine either fails to do good, or is for some reason inadmissible.

I have tried it in all forms of neuralgia, but have found it most serviceable in cases in which the pain is more or less periodic. It should be given in large doses. In none of my cases was a less dose than eighty grains in twenty-four hours administered. In none did it disagree or cause any symptom more troublesome than tinnitus.

A remedy which does not disagree, and which sometimes succeeds where quinine fails to relieve a periodic tic, is one which may fitly claim a place in the therapeutics of neuralgia.

Cold in the head. (Coryza, rhinitis)—This most troublesome ailment is one which we are seldom called on specially to treat; partly because (except in infants) it is not a source of anxiety, and partly because every one knows that remedies are of little avail in shortening the duration or mitigating the severity of the attack.

While I was making observations on salicin, in February, 1875, I had a bad cold in the head. It seemed to me (for reasons which I need not stay to give here) that salicin was a very suitable remedy for my ailment. I therefore took twenty grains every two hours. I took the first powder at 8 in the morning, and continued to take it every two hours during the day. After the third dose I was quite sensible of feeling better; and when evening came, having taken in all 160 grains, my cold was gone; I felt quite well.

I took forty grains at bed time, and got up the next morning perfectly well. As a precautionary measure, I took the salicin in twenty grain doses four times a day for a couple of days. I did not use any other means to get rid of the cold, and did not even remain in the house.

I have frequently had such colds, but never got rid of one so quickly before. [Here a number of illustrative cases are given.]

It is unnecessary for me to make any remarks. The details of the above cases speak for themselves. I would simply note that it is not every catarrh, but *cold in the head*, that is benefited by salicin.

In *acute lumbago* I have twice found speedy relief follow the administration of salicin in twenty grain doses every hour. The local application of heat was also resorted to in these cases, and may have helped the cure; but my impression, and also that of my patients, was that the chief credit pertained to the salicin.

In two cases of *hay fever*, one treated by salicin, the other by salicylate of soda, each taken in the dose of 20 grains every two hours, relief was experienced while the drug was being taken; but the symptoms returned when it was omitted.

I give these short notes of different maladies, all of which are very common and very troublesome, and none of which is particularly amenable to treatment, in the hope that others may be led to try salicin in their management. The drug is a perfectly safe one, and may be given in large doses with impunity. It is so quickly eliminated from the system that its full beneficial action can only be got by giving it in frequently repeated doses.

For an adult, fifteen to thirty grains every hour is not too much where it is desired to get a speedy action.

It is a very pleasant bitter, and is best taken stirred up with about an ounce of water in a wine glass, a little syrup of orange being added for those who like it.

Urethral Fistula Treated by the Elastic Ligature.—Dr. John H. Packard, of Philadelphia (*Trans. Med. Soc. Pa.*, 1877), reports the case of a boy 14 years old, who had had urinary trouble for seven years. Neither he nor his friends could give any accurate history of his case. On entering the Episcopal Hospital, *Oct.* 7, 1876, he had some narrowing of the urethral canal, and three fistulous openings communicating with it. One, at the peno-scrotal angle, had existed ever since an attack of sickness when he was about seven years of age; the other two were situated, one on either side, about half way between the anus and the tuber ischii, and were said to have been first noticed in the autumn of 1875. There was no history of injury, so far as known.

Until within the last year, he had been unable to control the evacuations from his bladder, day or night, and his clothes had been constantly saturated with urine. He now, by passing water frequently, could avoid this. The stream was of fair size. The urine was loaded with a heavy, yellow deposit, consisting of pus, mucus and vesical epithelium, with some black, granular, amorphous matter, probably broken down blood. Latterly, there had been some dribbling of urine from the left perineal opening.

Oct. 10, 1876. He was etherized, and perineal section performed on a small staff. In introducing the staff, a slight roughness was felt, as of a calcareous deposit. A free incision was made in the median line. Probes introduced at the fistulous orifices were brought out through the wound of operation; and by means of them a seton of ligature silk was passed through such sinus.

Oct. 24. An oakum seton was substituted for the silk in the anterior fistula—the sinus showing no tendency to heal.

Nov. 16. An elastic ligature was tied to the oakum seton, drawn through, tightened so as to produce slight constriction, and its ends tied together with a thread. By this means, the constriction being renewed every two or three days as the tissues yielded, the division was being very satisfactorily accomplished, when

Dec. 10. The rash of scarlatina developed itself, and the local treatment was for the time suspended.

Dec. 21. Elastic ligatures were passed through the other sinu-

ses, brought out at the wound of operation, and then tightened.

Jan. 26, 1877. The fistulous tracts had become so superficial, the tissues having closed in behind the advancing ligatures, that they were laid open by the knife, and healing took place very readily, though I think not quite so soon as would have been the case had the elastic ligature been allowed to do the whole work.

The difficulty in dealing with cases of this kind, where a fistulous track extends forward to the peno-scrotal angle from some point far back in the urethra, is probably known to every practical surgeon. By a very careful and painstaking dissection, the tissues may be divided so as to lay the sinus open. But this involves so much trouble and risk, that most surgeons would hesitate long before undertaking it. The plan adopted in the case now reported is easy, painless or nearly so (after the perineal section has been performed), and devoid of danger.

It is noticeable that the tissues closed up behind the ligature very kindly, as it made its way through. This has been the usual experience of the reporter in cases of fistula in ano, etc., although some surgeons have found the healing process less prompt.

Significance of Muscular Contractions.—Benjamin Lee, M. A., M. D., of Philadelphia, in a capital paper on the "Diagnosis of Psoas Abscess," in the *Transactions of the Medical Society of Pennsylvania*, 1877, incidentally makes the following practical remarks:

In my opinion, and it has been arrived at not without extended observation and careful reflection, there is no such thing as "a *trifling* muscular contraction." Persistent contraction of a muscle is always a *serious* matter. It means mischief—mischief, sometimes, it is true, simply in its own substance, in the shape of phlegmonous inflammation, when it will not be long in making its true nature apparent; but oftener, in the vast majority of cases, mischief in an entirely different and often distant organ, of which it is merely the reflection, and, to the thoughtful observer, the index.

It is the index, first, of obscure disease in the joints. Long before the attention of parents or physicians is called to the hip in the early stages of coxalgia, the watchful hamstrings and gastrocnemius begin to contract, and, by slightly flexing the knee and elevating the heel, produce the peculiar limp which we have all of us learned to look upon as pathognomonic of that treacherous disease. Contractions about the knee lead us to

look for strumous disease in that joint, although it may have been entirely free from either pain or swelling.

It is the index, secondly, of a cause of irritation in the course of a nerve trunk, or at its origin, or at its point of exit from the spinal foramen; or of disease, whether functional or organic, of the spinal cord, or even of the brain itself. It would be foreign to my purpose here to indicate the differentiation of the symptoms of these various phases of contraction of nervous origin. I will simply call attention to that very common form which goes under the misnomer of *muscular rheumatism*, for which, of late years, the more descriptive and non-committal name of *myalgia* has been proposed, and still further to narrow it down, to that localization of it to which we assign the designation of stiff-neck in slighter, or torticollis or wry neck in severer cases.

I believe that in all cases of obstinate *torticollis*, unless where the muscular tissue has itself been involved in injury or inflammation tending to suppuration, the lesion is in the spinal cord or in the nerve trunk just after emission. In many cases, I have been able to trace it back to a direct injury to the cervical spine, which had been forgotten by both parents and patient; in other cases, the connection of cause and effect had been so evident that they could not but notice it themselves. In the milder form, I am strongly of the opinion that it depends upon a disturbance of the circulation of the spinal cord, due to general exhaustion of the system. The local condition may be one of anæmia or hyperæmia, but the systemic condition is one of depression—and one of its most frequent causes is too much brain work or anxiety, often accompanied with loss of sleep. It is, therefore, if this view be correct, in no sense to be trifled with.

Much the same cause operates lower down in the spinal column to produce *lateral curvature*. And how common is it in the early stage of this disease for the physician to slight the fears of the anxious mother, saying, "O, it's a trifle; let it alone; give her plenty of fresh air and exercise, and she'll outgrow it." I have rarely been consulted in a case of idiopathic lateral curvature, no matter how great the deformity, which had not gone through this experience.

A *British Review* recently contained a superficial and rather ill natured critique on a number of works on deformities, in which it took occasion to contrast in a very unfavorable light those physicians who are inclined to resort to the early use of mechanical appliances in such cases, with the "high-toned practitioner" who says, in his grand, off-hand manner, "My dear madam, there's absolutely nothing the matter with your daughter. Take her to the country; let her ride on horseback every

day; make her take a walk before breakfast, and drink plenty of milk," with other well-meant platitudes, pockets his two guineas, and "hears nothing more of the case." It is true, he hears nothing more of it, but the orthopœdist may, and often does. For, after months or years of weary, painful effort to follow out the prescribed *régime*, the unfortunate girl, now grown, perhaps, to womanhood, comes to beg him, if possible, to save from absolute wreck a form that might have been preserved a model of womanly beauty. Let us not, therefore, I urge, as we value our reputations as skillful diagnosticians, slight a muscular contraction. Muscles don't contract without a cause—a provocation. Seek out that cause. Determine that provocation. Let no nerve, joint or organ, which, by direct or by reflex influence, could possibly be implicated in its production, go unexamined. When we have subjected all these possible sources to a rigid scrutiny, and found them unoffending, then, and not until then, may we wisely venture to pronounce a contraction "trifling." In the case of disease of the vertebræ, it will be observed we have an opportunity for both sources of muscular irritation to come into play, viz.: the articular and the nervous.

Is the Human Eye Changing its Form and Becoming Near-sighted, under the Influence of Modern Education?—Dr. E. G. Loring, in his valuable paper, read at the adjourned annual meeting, November 5th, 1877, of the Medical Society of the County of New York, said that hereditary influence was an important element in the production of myopia, and, although statistics did not strongly endorse that view, he still held that legendary information should receive much credence. In regard to the influence of modern education, it was found that a larger proportion of those living in cities were near-sighted than those in country districts; and, moreover, in those cities where intellectual pursuits were greatest, the largest number of myopes were found. In savage nations, near-sightedness was very infrequent, and it would seem, in some respects, that it was a result of education. While the intellectual classes in Germany showed a large proportion of myopia, it was not so found in those artisans who used their eyes on fine objects, as watch-makers and wood-engravers. In England, where there has always been great intellectual activity, by no means as large a ratio of near-sightedness had been detected as in Germany, and it became necessary to seek for other factors to explain the prevalence of myopia. Impaired nourishment, imperfect ventilation, together with a sedentary life, had a marked tendency in producing laxity of the tissues in general, including of necessity the coats of the eye-

ball; and, with the tension which resulted from close application of the sight, there was a great probability of lengthening of the eye, or myopia, resulting. In New York, the German children were found more often near-sighted than other nationalities. Undoubtedly myopia was hereditary, but in all probability it could, under certain circumstances, be developed; but Dr. L. did not believe that of necessity it must increase in a nation engaged in literary pursuits. In the United States, the normal eye predominated, and he thought it was due to the fact that the young were more in the habit of indulging in out-door sports than in Germany. The same was true of England. From a careful analysis of the myopic cases, it was found that between the ages of ten and fifteen the majority developed; or, in other words, at that time the tissues of the globe were more readily affected by strain of the muscles of the eye. It could be easily understood, under such an hypothesis, why the industrial classes were so little liable to near-sightedness, for they seldom reached the practice of the more intricate branches of their trade before their eighteenth year. In conclusion, Dr. Loring was of the opinion that, under proper precautions, the normal eye could be continued indefinitely. If children were not allowed to apply themselves too closely to their studies between their eighth and sixteenth years, and were, moreover, allowed the proper amount of out door exercise, not much danger need be dreaded. It was important also to have the schools properly ventilated, and other hygienic conditions made as perfect as possible.

Dr. John C. Dalton thought that children at the present time were educated beyond their capacity, and that a great error existed in the present system of instruction.

Dr. H. D. Noyes said that he was not in a position to enter into the subject in the manner Dr. Loring had done, and could only speak from the results of his professional experience. He had no suggestions to make concerning the thorough and valuable paper that had been read.

It had occurred to him that hypermetropia was of more frequent occurrence than myopia. He did not know, however, if any statistics had been prepared on the subject. The conclusion which Dr. Loring brought forward he thought to be very pertinent. The prolongation of the eye was in great part due to relaxation of the tissues. Myopia was of most frequent occurrence in weakly and non-robust people. He thought it could be thus readily understood how the English, as a people, suffered so little from near-sightedness. The Americans, though not so robust, were wiry, and capable of enduring fatigue. He was in accord with Dr. Dalton in saying that the present scheme of ed-

ucation was imperfect; over-schooling was not always training. He thought that Dr. Loring's valuable deductions should be brought before the community at large, and particularly should be impressed on those who control the education of the young.

Dr. Peter A. Callan said that Dr. Loring's paper was so exhaustive that but little remained to be said on the subject. He had made some observations on colored-school children, and found that myopia existed in one per cent. among those attending the primary schools, and three per cent. in the higher schools. He was disposed to consider defective school hygiene as an important factor in the production of myopia. He was of the opinion that, so far, proper statistics on myopia in England had not been prepared. Moreover, there was there a prejudice against the use of glasses, and a casual observer of the people might be given a wrong impression.

Dr Mittendorf thought the defective school-hygiene among the Germans was an important element in rendering myopia so prevalent.

Dr. Samuel B. St. John had noticed the fact that some families were characterized by myopia In Germany, until recently, the old German text was used in the school-books, and, from the similarity of many of the letters, considerable tension of the eyes was necessary to distinguish them.

Dr. O. Sullivan took up the subject of school-hygiene, and was of the opinion that it would be difficult to find any place that was more defective in this respect than New York. The ventilation was insufficient. He had known instances where the windows of the school were alongside the water-closet. Moreover, the light, in many instances was so poor as to require considerable straining of the eyes to make out the lessons.—*New York Medical Journal, Dec.*, 1877.

Corpulence Treated by Sea-weed.—Dr. M. M. Griffith, of Parsons, Penn., in a little pamphlet (noticed in the *New Orleans Medical and Surgical Journal*, November, 1877,), gives a complete resumé of all that is known on this subject. In addition to the "Banting system" (selection of foods non-fattening in their character), Dr. Griffith advocates the use of the *fucus vesiculosus* (*sea weed*, *sea-wrack*, *common sea ware*, or *bladder-wrack*), belonging to the cryptogamia algæ in the sexual system, and to the natural order of algaceæ. It is diuretic and tonic in its action. It may be used in pills [dose, gr x to ℈j], decoction or in fluid extract form. The testimony of Mr. Duchesne Dupare is added to that of the author as to its efficacy. Dr. Dunglison, in his *Medical Dictionary*, says, its efficacy is dependent upon the iodine it contains.

Treatment of Pyæmia and Septicæmia.—R. A. Watson, M. D., Surgeon to Jersey City Charity and St. Francis Hospitals, Jersey City, N. J., in the *New York Medical Journal*, Nov. 1877, says:

The prevention of both pyæmia and septicæmia is probably within the scope of possibility in the large majority of cases; but the cure of the affection when fully developed is always doubtful, and frequently impossible. Every surgeon will readily admit that, were it possible to secure union by first intention in all cases of wounds, then it would be impossible for either septicæmia or pyæmia to occur in surgical practice. Therefore it follows that the character of the wound, the method of operation, the surroundings of the patient, and the character of the treatment, thus become proper points to consider in this division of the subject.

1. *Pyæmia.*—I desire to express my firm conviction that surgical pyæmia is *essentially* and almost *wholly* a hospital disease. The question of surroundings for the patient presents to my mind the following demands as *sine quibus non* for obtaining the best possible results in surgery: (1) Absolute cleanliness. This demand should be strictly enforced in regard to the wound, the patient's body, the bedding, and everything else, including nurses and instruments. (2) Absolute purity of the atmosphere. (3) Moderate and equable temperature, containing a proper amount of moisture. (4) Proper quantity of nutritious and easily-digestible food, etc., with suitable drinks, etc. (5) Cheerful and pleasant surroundings, especially in companions, nurses, and other attendants.

The over-crowding of surgical wards with severe surgical cases, especially where the ventilation is defective, is only one step removed from homicide. There should be allowed to each surgical patient, while there is considerable suppuration still going on, two thousand cubic feet of air, and more if possible. The ventilation should be so arranged that neither the patient nor the nurse can change it. It ought to be wholly under the control of the attending surgeon.

The question of treatment brings up the entire subject of antiseptics. The favorite remedies of this class are carbolic and salicylic acids, permanganate of potash, chloride of zinc, and liquor sodæ chlorinatæ. Good results may be obtained with any of these remedies. Much more will depend on the manner in which they are used than on the remedy itself. The surgeon should never forget that he uses medicines merely as agents to enable him to accomplish certain objects; and, keeping these in mind, he need very seldom fail with his antiseptic when the ob-

ject is to prevent putrefaction in an open wound. He should at all times, by the proper use of the senses of sight and smell, be able to decide promptly whether or not the antiseptic is accomplishing the work. It certain cases, while using certain antiseptics, it will be found advantageous to keep up constant irrigation; and in other cases, by certain methods of treatment, the antiseptic is stored up for gradual use, as may be required. Therefore, it appears certain that each method of treatment may possess special advantages in particular cases, and probably the same may be said of the antiseptic itself. The importance of this subject may be more fully appreciated when it is remembered that it is generally admitted by the best surgical authorities that more lives are lost by septic infection than from all other causes combined during a war.

The further consideration of this subject may be arranged for convenience under the heads of local and general treatment. The *local treatment* of the wound should, if possible, be of such a character as to prevent the absorption of either putrid substances or pus. It, therefore, becomes highly important, in cases of amputations and other operations, that all tissues injured to such a degree as to be likely to excite either putrefaction, irritation or inflammation, should be removed. The same care is necessary in removing all foreign bodies from the wounds in cases where no operation is performed. The amputation of the injured limb may be necessary to prevent the development of these diseases, or may be resorted to in certain rare cases after the origin of pyæmic symptoms; however, in the latter instance great care should be taken to remove all the tissues already infiltrated with serum, otherwise nothing will be gained. The use of the surgeon's knife at the proper time may be the best prophylactic measure against both pyæmia and septicæmia; but this measure should be directed by an intelligent mind, and the instrument guided by a practised hand. Again, it is found that opening a large medullary cavity is attended with danger to the patient. This fact teaches an obvious lesson.

The wound existing, or the operation having been performed, the surgeon now turns his attention to the prevention of putrefaction and inflammation. The first source of danger requiring attention from the surgeon is the fluid escaping from the wounded surface. Do not allow it to undergo putrefaction in contact with the wound. Whether or not there is danger to be apprehended from inflammation, depends largely on the character of the wound; contuso-lacerated wounds are especially liable to become inflamed, and many other varieties, only in a less degree. The use of sutures is a question to be decided in each particular

case. The same may be said of the use of antiphlogistic remedies.

The question having been decided in favor of their use, then comes the selection of the special remedy. Prof. Billroth has recently given this subject much thought, and thus records his opinion: He inclines to the belief that the bath may be properly used in the treatment of contuso-lacerated wounds confined strictly to the hands and feet. Here the patient finds comfort when the temperature of the bath is properly regulated and the limb allowed to float in the water. In the majority of cases, he prefers the use of ice, either with or without the ice-bags. He found that the application of ice to a limb lowered the general temperature of the body, diminished the size of the capillaries in the diseased parts, retarded putrefaction, lessened the absorption of putrid substances and limited the extension of inflammation. He also claims that wounds heal kindly even during the continuation of the treatment. There are cases in which the use of leeches may be advantageously resorted to for the purpose of relieving inflammation. Warm poultices may be used for the purpose of effecting a more speedy removal of the necrotic tissues covering the surface of the wound than would otherwise take place, but it should never be forgotten that the "poultice is a means of applying continuous heat with moisture, and of softening the tissues. An afflux of blood takes place to the parts, the vessels dilate, the tissues, softened by the combined influence of heat and moisture, permit the easy diffusion of fluids.

Foul-smelling wounds requiring the use of poultices are best treated with the yeast or charcoal poultice. "The application of poultices sometimes degenerates into abuse. If too long continued, the skin becomes white, wrinkled and sodden; small abscesses or boils form, and the vessels of the parts very slowly regain their tone. If kept too long in contact with wounds or ulcerated surfaces, the granulations become pale and flabby, and the healing process is retarded. Applied indiscreetly to inflamed joints, they may promote suppuration, and thus permanently injure these structures. If kept long in contact with a large extent of surface, they will lower the general tone and vigor of the system, depress the systemic circulation, exhaust the irritability of the vaso-motor nerves, and thus seriously embarrass the reparative process, if not wholly prevent repair." Bartholow, *Materia Medica and Therapeutics*, pp. 515, 516.

It appears probable that more injury than good results from the use of poultices in cases where there is reason to fear pyæmia. I think, in all such cases, the use of the poultice should

be limited to the cleansing of the wound by hastening the removal of necrotic tissues, and am satisfied that the practice of wrapping the whole arm or leg in hot poultices, in cases of cellulitis arising in connection with septic absorption, is highly *injurious, especially when continued for a long time.* Free scarification of the integument where there is great tension of the parts may possibly become necessary for the purpose of relieving pain and aiding the circulation; but the surgeon should not forget here that he is opening a new avenue for the admission of the poison. Abscesses should be opened as soon as discovered, in the majority of cases, because of the pain and fever caused by them. Tincture of iodine is serviceable in certain stages of inflammation, as a local application. Caustics may be used to aid Nature in throwing off a slough, and occasionally as a stimulant to an indolent wound which fails to granulate properly. Healthy granulations should never be destroyed lest their destruction should open other channels for the admission of the septic poison in the system. Drain-tubes may be required to prevent any accumulation of pus within the wound.

It has been suggested as a prophylactic measure against pyæmia that a ligature of the veins between the thrombus and the heart would be a rational measure. It seems to present an almost insurmountable obstacle in the determination of the venous branch which should be ligated, and the impracticability of ligating the principal venous trunk of the limb. However, it is said that Lee has successfully ligated the cephalic vein at the elbow, in two cases of injury of the hand, after the appearance of the pyæmic chill. It has also been suggested that transfusion of healthy blood ought to be tried in suitable cases of this affection.

In the *general treatment* of pyæmia there has been recommended at various times a great variety of drugs; but the general want of success attending their use leaves comparatively few to be mentioned here. The mineral acids are still employed, and are found, at least, agreeable drinks, and as such can still be recommended. The sulphites of magnesia, soda, potassa, and lime, are recommended by Giovanni Polli for the treatment of typhus fever, small-pox, septicæmia and pyæmia. He further suggests that the medicine should be given until the whole quantity taken bears to the weight of the patient's body the proportion of one to a thousand. The experiments made on animals with these salts seem to confirm their value in the treatment of septic disease. It is certainly true that animals treated with these salts are not so easily affected by septic poison as those which have not received the treatment. Further, it has been

shown that putrid substances when mixed with either the permanganate of potassa or the carbolate of soda, and then injected, are harmless, although the same quantity of putrid matter without the salts destroys life. Quinine certainly, in most cases of pyæmia, is a valuable agent. In large doses it enables the surgeon to reduce the temperature of the patient, and in smaller doses it frequently serves a valuable purpose as a tonic. It has also undoubtedly considerable value as an antiseptic. Labbin has recommended the use of large doses of ergotine in infectious fevers, which should begin on the day the injury is received. The use of drastic cathartics should be avoided, and also sudorifics, on account of their prostrating effects. In some cases, hypnotics may be required to secure sleep. Tonics are always more or less useful. The free use of stimulants is also indicated. Brandy, wine, and whiskey, may be used by the patient in accordance with his own taste. Musk, ammonia, and camphor, are occasionally required. However, it should not be forgotten that, in cases where the disease has become fully developed, the usual termination is death, few recoveries being recorded. In the early stages of this affection, by the removal of the patient from an overcrowded hospital-ward to some place where pure air, proper hygienic arrangements, and a judicious use of medicines can be obtained, recovery may take place; but under other circumstances the prognosis is exceedingly grave.

2. *Septicæmia.*—The treatment of septicæmia in most particulars is the same as that of pyæmia. The first effort should be to prevent the development of the disease, and the second to cure the patient in cases where the affection has already developed. It is not in our power to limit or in any way regulate the primary injury, but we are obliged to take the patient as he is. The amount of destruction to living tissues may be great or small. The question of an operation, the character of the same, and the subsequent management, must be determined in accordance with the circumstances of each particular case. The primary death of the parts is generally due chiefly to the injury itself; the secondary, frequently to bad surgical management. Let us take a case in which the primary injury has been severe, greatly diminishing but not destroying the circulation in the injured parts; here the immediate application of ice would be locally injurious, but an evaporating lotion or warm applications might assist Nature. We have already seen, while speaking of the treatment of pyæmia, that the continuance, for a long time, of hot applications, is frequently injurious, or *even pernicious*. Let us now call to mind a case of contusion situated in the neighborhood of a large joint, where the injury to the soft parts will pro-

bably be followed by much sloughing if ice is used; but the great danger is inflammation of the synovial membrane, and to avoid this danger, the surgeon requires perfect rest of the parts, the application of leeches, and finally cold, or even ice. It is humiliating to the profession that we are obliged, even at this date, to admit that the treatment of septicæmia is largely symptomatic. The profuse choleraic diarrhœa which generally accompanies this disease may be regarded as an effort of Nature to eliminate the septic poison; but, nevertheless, it is so prostrating in its effects on the patient, that it requires to be controlled with properly-selected astringents, and these remedies may be still further aided by the use of tonics and stimulants.

The treatment of septicæmia may be summarized as follows: (1.) A strict adherence to the five rules given under the head of prophylactic treatment. (2.) The avoidance of all putrefaction in contact with the wound, especially prior to the development of sufficient granulations to completely cover its surface. This object is to be accomplished by the removal of all necrotic tissues, the avoidance of putrescent fluids by cleanliness, and the proper use of antiseptic agents. (3.) Free use of the alkaline sulphites and hyposulphites. These drugs should be used, in all cases where there is reason to anticipate the development of septic disease, as soon after the receipt of the injury as practicable, but should not be neglected even after the development has occurred. (4.) Sulphate of quinine should be used in all cases where the temperature is above 100° Fahr., and its persistent use in large doses may be necessary to prevent its rising still higher. It will be remembered in this connection that experience has taught that "a temperature of 108° Fahr. is the limit beyond which life can no longer exist,"* and a much lower temperature is not without danger. "The essential danger of fever in acute diseases consists, then, in *the deleterious influence of a high temperature on the tissues.*"†

Sulphate of Bebeeria in the Treatment of Menorrhagia.—Dr. R. H. Andrews, of Lansdale, contributes the following to the *Transactions of the Medical Society of the State of Pennsylvania*, 1877: In every grade of society the practitioner finds cases of excessive menstruation, and, in many instances, those women who labor under this difficulty regard it in the light of an inconvenience, rather than that of a disease. Some are affected with lassitude and prostration for the time being, from which they quickly rally upon the cessation of the flow while

*Liebermeister, "New Sydenham Society Translations," vol lxvi., p. 278.
†Ibid., p. 280.

others are afflicted more seriously; and to relieve the latter, promptly, is often of importance both to patient and physician.

The latter kind of cases have often given me a considerable amount of trouble, for nothing seemed to afford relief, until recently I was induced to try a new remedy. The administration of this medicine has given me better results than any other remedy heretofore used.

If the milder forms of menorrhagia are permitted to run on unchecked for an indefinite period, the results are certainly bad, and to a greater degree the same may be said of cases of a severer type. To cure patients, suffering from these forms of menorrhagia, is the object most desired, but often relief is all that can be accomplished.

Bebeeriæ sulphas—nectandra Rodiei—is the drug to which I refer, and it has proved in my hands a very effectual remedy for menorrhagia. The remedy is of eclectic notoriety, and is referred to by Prof. Scutter, in his work on "Specific Medication." My attention was first called to it in an article published several years ago by a physician of Boston.

I have used this preparation in five cases, and it gave entire satisfaction in all except one, which was otherwise complicated. I prescribed the remedy as follows:

℞. Bebeeriæ sulphas.....℈j
Sacchar. albi.....℈iss
M. ft. in chart. No. xii.

One of these powders is directed to be taken when the flow is very free, or if not free, in three or four days after the menses have appeared; repeated in four or eight hours, according to indications. The effects of such an administration of the remedy are, a cessation of the profuse flow, diminution in the length of the period, and in a measure curative of the disease.

So far I have not seen any unfavorable effects follow its use, and I regard bebeeria sulphas as a remedy of great value.

Book Notices, &c.

Transactions of the International Medical Congress of Philadelphia, 1876. Edited for the Congress by JOHN ASHHURST, JR., A. M., M. D., Professor of Clinical Surgery in the University of Pennsylvania, etc. Philadelphia: Printed for the Congress, 1877. 8 vo. Pp. 1153. Price, $6.

The pleasurable recollections of this Congress can never be

effaced from the memories of the American profession. Authors of the greatest renown from all parts of the world were congregated in Philadelphia to contribute their ablest productions to medical literature. While few things that were stated were absolutely new to the reading physician, yet scarcely a thing that was said was not valuable, and served to impress as truths many of the wonderful advances that had been announced in journals and perishable literature. If Mr. Lister did years ago announce the principles of his antiseptic plan of treating wounds, etc.; if Mr. Adams did formerly describe the plan of subcutaneous division of the neck of the thigh bone; if the journals have time and again contained accounts of the marvelous successes of Dr. Sayre in the treatment of Pott's disease—still these measures would not have become so popularly known in the brief interval since the adjournment of the session, had not these gentlemen, and others, in person explained their operations, and performed them in the presence of talented and competent witnesses. As it is, however, these very operations and methods, which used to be called the hobbies of the several authors, have now become commonly adopted by the profession. Personal observations of results have called the mind from the author to the fact; and now the physicians and surgeons everywhere avail themselves of the plans and methods they witnessed in Philadelphia. The good of that Congress here in our midst cannot be too highly extolled.

Our October number, 1876, contained such full reports of the proceedings of the various Sections that, in view of our limited space, we must be pardoned from entering into anything of material detail. Besides, the work, as a whole, is so valuable and so interesting, especially to the American profession, that no one who can afford it should be without a copy. But, since the circumstances of many individual physicians will not permit the expense of even the small price of this work, we wish to make the suggestion regarding it that we did regarding *Ziemsenn's Cyclopædia*, viz.: that local societies everywhere should subscribe to these *Transactions*. This volume is one that will be of use for reference for many years to come, and there is no probability that a second edition will ever be printed when the present is exhausted.

We were particularly interested in scanning some of the addresses. Dr. Toner's Address on Medical Biography is a work of an immense deal of labor, and is of great historic value. After paragraphic biographical sketches of the most eminent of American medical men, Dr. Toner epitomizes the medical history of the several States of the Union. The address by Dr.

Stanford E. Chaillé, of New Orleans, on the Origin and Progress of Medical Jurisprudence, received the fullest of all reports in our October number, 1876, because it appeared to us to be one of the greatest importance to the profession. Dr. L. P. Yandell, in his Address on Medical Literature, came near omitting mention altogether of the *Monthly* as one of the "establishments" of the first century; and he says of the *Medical Weekly*, a new journal was started, called the "*Medical Times*[?] at Louisville, by Dr. E. S. Gaillard."

We wish our space permitted a notice of some of the contributions to this immensely valuable volume. Chief among such papers is one by Dr. Charles Denison, of Denver, Colorado, upon the "Influence of High Altitudes on the Progress of Phthisis." To physicians of every section this paper is of intensest interest, as bearing upon the question invariably asked by the wealthier class of consumptive patients, "Where shall I go to regain my health?" Scarcely of less widespread importance is the paper on the "General Subject of Quarantine, with particular reference to Cholera and Yellow Fever," by that most eminent of authorities on such subjects, Dr. John M. Woodworth, Surgeon General, Mercantile Marine Hospital Service, U. S. America. The conclusion adopted by the Section that, "in some countries, the detention of passengers and crews of ships hailing from infected ports is warranted, but for such time only as is necessary to complete the period of incubation of cholera or yellow fever," is the practically valuable one of the several conclusions. Of other papers of more special interest, there are "The Causes and Geographical Distribution of Calculous Diseases," by Claudius H. Mastin, of Mobile, Ala.; the "Treatment of Syphilis, with Special Reference to the Constitutional Remedies Appropriate to its Various Stages, the Duration of their Use, and the Question of their Continuous or Intermittent Employment," by Dr. Edward L. Keyes, of New York; "Are Diphtheritic and Pseudo-Membranous Croup Identical or Distinct Affections," by Dr. J. Lewis Smith, of New York; the "Pathology and Treatment of Morbus Coxarius," by Dr. Lewis A. Sayre, of New York; "Penetrating Wounds of the Abdomen, with the Suggestion of a Change of Treatment in Such Cases," by Dr. L. A. Dugas, of Augusta, Ga.; "A Universal Pharmacœopia," by Dr. Edward R. Squibb, of Brooklyn.

It is a pleasure to know that, in addition to the completed volume, most of the authors have had enough reprints made of their respective articles to supply any friends who may apply to them by letter for copies.

A Compend of Diagnosis in Pathological Anatomy, with Directions for making Post Mortem Examinations. By Dr. Johannes Orth, First Assistant in Anatomy at the Pathological Institute in Berlin. Translated by Drs. F. C. Cheever and G. K. Sabine. Revised by Dr. R. H. Fitz, Assistant Professor of Pathological Anatomy in Harvard University, with Numerous Additions from Manuscript prepared by the Author. New York, Hurd & Houghton, 1878. Pp. 440–xxxvi. (For sale by West, Johnston & Co., Richmond. Price, $3.50.)

This work, which is just issued, supplies a most important want. Its title, as given above, indicates the range of subjects considered. The practical character of the work is one of its chief recommendations to the every day physician. It seeks to trace the relation of effect to cause, and thus aid to a rational diagnosis. To coroners and all others who have to perform autopsies—whether for scientific or medico-legal purposes—the book is simply invaluable. We speak our conviction unreservedly, after a more than ordinarily careful examination of the work, in saying that we know of no work published that can take the place of the one under notice. To every student of medicine, it will serve as an eminent and useful reference book.

The style of the author's composition is pleasant; his arrangement of subjects natural; and the translations easy. As the publication is made by the Riverside Press, it is almost unnecessary to add that the printing and binding are excellent.

Transactions of the Medical Association of Georgia. Macon, April 18th–20th, 1877. Pp. 198. Dr. William O'Daniel, Bullards, *President;* Dr. Jas. B. Baird, Atlanta, *Secretary.*

The importance of *Rest* in the treatment of disease is very forcibly argued in the address of the retiring President, Dr. Robert Battey. His easy composition, and his usual practical views, led us to read with profit every word he wrote on this familiar subject.

The annual oration was delivered by Dr. J. S. Todd, of Atlanta, whose subject was *Medical Superstitions, and the Influence of Mind over Body.* This oration, in many places, bears the marks of careful research, and, as a paper, is exceedingly readable, although there is nothing new in it.

The report of the *Section on Gynæcology for the First Congressional District* refers entirely to endo-cervicitis and endometritis, and contains nothing that has not been time and again

said. Incidentally, Dr. Le Hardy says, "Perhaps on account of the peculiar climate and topography of our section [about Savannah], cases of ruptured perineums are rarely heard of, difficult labors are few, and lacerations very seldom met with." How topography of the country can influence the perineums of women lying down in their beds to have children, is a proposition we do not understand.

The paper on *Some of the Evidences of Progress in Medicine*, by Dr. J. G. Westmoreland, of Atlanta, considers chiefly the questions of disease-producing germs. Since bacteria cannot penetrate the skin, and oxygen also being necessary to fermentation, Dr. W. asks, "Why should meat first spoil at the bone?" Have we not gone too far with the bacterian theory of disease?

Prof. A. W. Calhoun, M D., of Atlanta, contributes a useful and suggestive paper on *Defects of Hearing and other Evils, the Result of Enlarged Tonsils, and the Urgent Necessity of Immediate and Proper Treatment in order to Restore the Ear and other Neighboring Organs to their Accustomed Functions.* This is a very useful paper.

In the *Report of the Section on Surgery for the Sixth District*, Dr. D. W. Hammond, of Macon, details a case of lithotomy, and incidentally remarks that he has operated 21 times with the gorget, without a single fatal result. In reporting a case of elephantiasis, in which some dangerous symptoms arose from the chloroforming, he suggests that when asphyxia occurs, and there is not sufficient help present to invert the patient after the method of Nélaton, the head should be pulled to the side of the bed, the feet carried across it; then, by holding up the patient's feet, the head and shoulders slide down to the floor. During this operation, turn the patient upon his chest, with face downwards; this position, by pressure, would force the blood out of the abdomen and thoracic viscera into the brain. As soon as the patient gives sign of returning life, turn him on his back so as to give the diaphragm and abdominal muscles free play.

Reminiscences from the Case-Book of Memory, and Surgical Report of the Seventh District, by Dr. Charles P. Gordon, of Dalton, is full of interesting details of cases.

We noted in our October number the case of Dr. Smith, of *Ligation of the Left Primitive Carotid Artery.*

Prof. John Thad. Johnson, M. D., of Atlanta, gives an excellent review paper on *A Comparison of the Different Methods of Treatment of Stricture of the Urethra.* We wish we had the space to record his conclusions.

Dr. C. B. Leitner, of Columbus, in his *Treatment of Carbuncle*, recommends that, if there is no opening, make one and

exhaust a large-size cupping-glass over it. This may have to be repeated several times within a few hours. But the glass will do more within these few hours than three days of poulticing.

Dr. Hunter, of Louisville, reports for the *Section on Practice of Medicine for the Eighth District.* Under the head of "Analyses, Selections, etc., we note Dr. H's remarks on "Muriate of Ammonia in Ovarian Tumors."

A great number of interesting clinical cases are reported by various physicians, but we are unable to spare room even for the titles. Such cases are lost to the profession when contributed to Society Transactions as usually published; they should be contributed to the journals.

The next meeting will be held in Atlanta April 17, 1878.

Transactions of the Medical Society of the State of Pennsylvania. 28th Session. Held at Harrisburg June 13th and 14th, 1877. Pp. 440. Dr. D. Hayes Agnew, Philadelphia, *President;* Dr. Wm. B. Atkinson, Philadelphia, *Permanent Secretary.*

This, as are all the publications of this Society, is a capital volume. "The Old Philosophy and the New Philosophy of Physics" is the subject of the Address of the retiring President, Dr. Robert B. Mowry, of Alleghany City. And after an urgent Appeal for the Better Care of the Insane Poor of Pennsylvania (of whom it is estimated there are about 700 without suitable provision), by Dr. John Curwen, of Harrisburg, come the regular annual addresses in the different departments of medical science.

The Address in Obstetrics is by S. B. Kieffer, A. M. M. D., of Carlisle, on *Puerperal Convulsions.* This is a decidedly valuable paper. A great deal of attention is given to a consideration of the predisposing causes. As to temperament, Dr. K. says, in his latitude "the blonde stands in relation to the brunette in the proportion of, probably, about one to three. * * Ladies of decidedly red hair approach nearest the brunette in their susceptibility to this disease. And it may be worthy of remark here, that though we have a population at Carlisle of which one-tenth is colored, *it has not occurred to me, during a residence of twenty-five years, to hear of one case of 'puerperal convulsions' in the negress.*" The sentence we have italicised is certainly a very remarkable one to us of the South, where we so frequently meet with puerperal convulsions in negro and mulatto women. But the whole paper is full of interesting statements and suggestions, which we have not the space to mention.

Dr. H. Lenox Hodge, of Philadelphia, contributes a most able Address in Surgery. It is a review of surgical progress during the last few years, and is unusually valuable.

Dr. John Curwen's Address in Mental Disorders is of no less *special* value, although the major part of his paper is devoted to a study of mania. The Address, however, also seeks to trace the relations between different forms of insanity.

Dr. Benjamin Lee, of Philadelphia, gives a striking Address in Hygiene. After arguing the importance of creating a State Board of Health, he presents the draft of an Act, which contains some features which will render the proposition more popular in other States as well as Pennsylvania.

Dr. P. D. Keyser, Surgeon to the Wills Ophthalmic Hospital, Philadelphia, gives an instructive paper on Some Forms of Inflammatory Diseases of the Eye, being caused by Defects in Refraction and Accommodation. In all his examinations of cases of conjunctivitis, pterygium, phlyctenular troubles, etc., he found some error in refraction or accommodation. The practical lesson is, that glasses often correct the tendency to such troubles. The suggestion is worthy of close study and experiment.

Dr. Benjamin Lee's paper on the Diagnosis ef Psoas Abscess so much pleased us that we have taken that part of this paper, referring to the significance of muscular contraction, for one of the selections in this month's issue. In describing a case of psoas abscess which came under his care, Dr. Lee has taken occasion to write one of the best practical papers on the subject in hand that we have ever seen.

Dr. Oscar H. Allis, Surgeon to the Presbyterian Hospital, Philadelphia, describes an injury of the elbow joint that he is forced to believe is frequent from the fact that he has observed six cases in a brief space of time; but which injury does not seem to have attracted the special attention of surgeons generally. The injury consists in Fracture in the Upper Third of the Ulna, accompanied by Dislocation Forwards of the Head of the Radius.

Dr. John H. Packard's paper on Urethral Stricture treated by means of the Elastic Ligature, contains a suggestion that seems so useful that we transfer a condensed report of his case to our columns this month.

Dr. Hugh Hamilton, of Harrisburg, gives a good review paper on The Metric System.

Dr. W. H. Hamilton, of Pittsburg, suggests a modification of Syme's Amputation at the Ankle Joint, as follows: "Commence the incision at the lower tip of the external malleolus, and, cutting down to the bone, carry the knife across the sole of the foot,

and terminate the incision about a half inch below the centre of the tip of the internal malleolus; then join the extremities of this incision by cutting directly across the front of the ankle, and open the joint in front; divide the lateral ligaments, and proceed at once to dissect the posterior flap from the os calcis, proceeding from the joint downward, dividing the attachment of the tendo-Achilles, and terminating the dissection at the point where the books direct it to be commenced."

The rest of the volume is taken up with the reports of the County Medical Societies.

A Manual of Bandaging. By C. HENRI LEONARD, M. A., M. D., With over 100 Illustrations. Detroit, 1877. Cloth. Pp. 132. Price, $1.50. (For sale by West, Johnston & Co., Richmond, Va.)

This is a very serviceable book to any practitioner. The value of such a manual is manifest upon reading the title. Not only is the work useful to the house physician or surgeon in our hospitals who have to "dress" wounds, etc., but it is of special value to those who have had but limited hospital or clinical advantages. The illustrations seem to be accurate, and are well printed; so that the book serves the purpose of a pictorial clinic.

The Multum in Parvo Reference and Dose Book. By C. HENRI LEONARD, M. A., M. D., Third Edition, Revised and Enlarged. Detroit, 1877. 16mo. Pp. 100. Cloth. Price, 75 cents. (For sale by Messrs. West, Johnston & Co., Richmond.)

Although this is advertised as the "Tenth Thousand," we do not see the ground of its special popularity, when so many visiting lists now-a-days contain most of the essential information contained in this pocket book. It does not seem to us to be worth 75 cents, under the circumstances.

We regret that our space limits us merely to the titles of the following publications received:

Transactions of the Wisconsin State Medical Society. Held in Madison, May 8–10, 1877. Dr. DARIUS MASON, Prairie du Chien, President; Dr. J. T. REEVE, Appleton, Secretary. Pamphlet. Pp. 158.

Transactions of the Indiana State Medical Society. Held in

Indianapolis, May 15–16, 1877. Dr. L. D. WATERMAN, Indianapolis, President; Dr. G. V. WOOLEN, Indianapolis, Secretary. Cloth. Pp. 169.

Leçons sur les Maladies Du Foie Des Voies Billaires et des Reins. (Lectures upon Diseases of the Liver, Bile Ducts and Kidneys.) Par J. M. CHARCOT, Professeur á la Faculté de Medicine de Paris, etc., Recueillies et Publicés par Bourneville et Sevestre, Redacteurs du *Progres Medical*, Paris, Ve Adrien Delahaye, Libraires, Editeurs. 1870. Pp. 380.

Report of the Board of Health of the City of Nashville, 1877. Dr. J. R. BUIST, President; Dr. J. W. B. NOWLIN, Secretary. Pp. 230.

Annual Report of the Virginia Eastern Lunatic Asylum, 1877. Dr. HARVEY BLACK, Superintendent and Physician.

Third Annual Report of the Executive Committee of the Asylum at Walnut Hill, Hartford, Conn., October 8, 1877. Dr. T. D. CROTHERS, Superintendent, etc.

Unfortunate Results of Vaccination. By Dr. HENRY A. MARTIN, Boston. (Reprint.)

Annual Catalogue of the Medical School of Harvard University, 1877–78.

Report of the Health Officer of the City and County of San Francisco. Dr. J. L. MEARS, Health Officer.

What Anæsthetic Shall we Use. By JULIAN J. CHISOLM, M. D., Baltimore, Md.

Stricture of the Urethra. By Dr. CLAUDIUS H. MASTIN, Mobile, Ala. (Reprint.)

Mental Hygiene for Pupil and Teacher. A Lecture. By EUGENE GRISSOM, M. D., LL. D., Raleigh, N. C.

Codes of Medical Ethics. Arranged and Compiled by C. HENRI LEONARD, A. M., M. D., Detroit, Mich. Price, 25 cents.

Puerperal Eclampsia. By Dr. J. P. THOMAS, of Pembroke, Ky. (Reprint.)

Aiken as a Health Station. By Dr. W. H GEDDINGS, Aiken, S. C.

Changes in New England Population. By Dr. NATHAN ALLEN, Lowell, Mass.

Sanitary Condition of Portland. By Dr. F. H. GERRISH, Portland, Me. (Reprint.)

Address to the Alumni of the Medical Department of the University of Buffalo. By FRANK H. HAMILTON, M. D., New York, N. Y.

Pyæmia and Septicæmia. By Dr. B. A. WATSON, Jersey City, N. J. (Reprint.)

Editorial.

Journalistic.—*The Arkansas Medical Record*, to be edited by Dr. James L. Hale, of Little Rock, Ark., will be a monthly journal of from 12 to 16 large double column pages of reading matter. It will appear January 15, 1878. Price, $2.50 a year. This is the first attempt at medical journalism in Arkansas.

The Practice of the Lake Region is announced in the *New York Medical Journal*. Drs Clarke, Woodworth and Myers, of Fort Wayne, Indiana, are editors. We have not seen the prospectus.

The Australian Practitioner is another announcement in the *New York Medical Journal*. The first number was issued in October. It is a quarterly publication.

The British and Foreign Medico-Chirurgical Review, which, for thirty-eight years has held a distinguished place in medical literature, was discontinued with the October number, 1877, owing to the gradual decline in receipts from its sale, due to the lessening demand for quarterlies of any kind.

The Philadelphia Druggist and Chemist is about to be commenced by C. C. Vanderbeck, M. D., Ph. D., editor and proprietor. It will be devoted to materia medica, pharmacy, chemistry, therapeutics and the collateral sciences. Dr. Vanderbeck is known to our readers as in every way able to furnish a first-rate journal, and we commend his enterprise.

The American Journal of Medical Sciences has attained its fiftieth year. It is the best quarterly medical journal in any language.

The St. Louis Clinical Record continues to flourish. Although we sometimes view the same subjects from different standpoints. and of consequence sometimes entertain opposing views, still there is so much of earnest zeal in its editorials, and excellence in its original and selected scientific matter, that we most cheerfully commend it to our subscribers.

The Atlanta Medical and Surgical Journal is remarkable for the excellence of its contributions. It is a first-rate journal, and keeps out of difficulties.

The New Orleans Medical and Surgical Journal is a first-rate exponent of Southern medical practice. It merits the support of the profession everywhere.

The American Practitioner, of Louisville, has been containing for the past two years some articles of rare ability from gifted pens, and it gives evidence of prosperity.

The Richmond & Louisville Medical Journal holds an anomalous position. It always comes with good scientific contributions, and very valuable selections. In these respects—the true purposes of medical journalism—it cannot be excelled. But its editorial department is too often in a squabble with somebody. No one beyond the parties interested care for personalities in a scientific journal.

The Louisville Medical News has been gradually drawing from the field of college contests, and is now, we do not hesitate to say, an exceedingly valuable weekly.

The Clinic and the *Lancet and Observer*, of Cincinnati, are both excellent journals. The former is a weekly publication by Dr. Roberts Bartholow, the eminent author of several valuable works.

The Medical Times, of Philadelphia, is a bi-weekly, and always contains something good.

The Medical and Surgical Reporter, of Philadelphia, is a most valuable exchange. All in all, it is the best weekly in the country for the general practitioner.

The American Journal of Obstetrics, under the editorship of Dr. Paul F. Mundé, of New York, has no superior. Indeed, for American practitioners, it is the best special journal that comes to us.

The New York Medical Journal has long been one of our favorites. Its papers are always excellent.

The Pacific Medical and Surgical Journal, published in San Francisco, is so far away from us that we do not often hear of it. But there is no exchange that we look for with more regularity, or value more highly. It always contains something useful.

The Quarterly Journal of Inebriety, published by Dr. T. D. Crothers, at Hartford, Conn., is one of great value to specialists in that field, and should be well patronized. The price is $3 a year.

The October number of *American Journal of Insanity* gives about 220 pages to the proceedings of the session of the Association of Superintendents of Insane Asylums, held in St. Louis May 29th, 1877.

The *Medical Record* will be enlarged by four pages with the commencement of the coming year, without extra subscription price—$5 a year.

With the January issue, 1878, of the *St. Louis Medical and Surgical Journal*, Dr. Thomas F. Rumbold will assume editorship, and we are confident of his success.

Had we the space, we would be glad to give here a notice of

each of the other exchanges we prize. We want our readers to know the best, and to patronize them in making out their lists for the new year. While we are enjoying success, we are anxious to see similar enterprises equally satisfied with their prosperity. Do our exchanges ever consider that in cultivating pleasant relations between the respective editors, and in discussing opposing views without venom, but with a regard for the usual courtesies of society, they are better serving the interests and wishes of the profession? By setting the example ourselves of discussing opposing convictions of right without personalities, and without harshness, we would be helping the profession at large to become more of a unit—more of a brotherhood. As it is, doctors, who should have the Christian graces more highly developed by the nature of their calling than other people, on becoming editors, too often think it their duty to show a combative spirit, and sometimes even become causelessly insulting. We are aware that there is something in human character that excites opposition to any attack. Knowing this, if we have a principle at stake, is it not better to resort to persuasive arguments than to create animosity by bitter denunciations of the parties who hold contrary views? But occasionally plain words are demanded.

The Hospital Gazette and Archives of Clinical Surgery, of November 1st, 1877, says, in speaking of Dr. Polk's articles:

"We think the profession should know the journals which have betrayed the sacred trust imposed in them when they received its support, *and evidently for the purpose of securing the advertisement or obtaining the subscription of the Professor of Surgery in the Eclectic Medical College of Pennsylvania.*"

So much of the above sentence—italicized by ourselves—as in any way impugns the motives of the *Virginia Medical Monthly*, is an unprovoked and unmitigated slander, and an infamous falsehood.

Dr. Polk's Card, page 637, November number of the *Monthly*, should not have been admitted to our columns. We therefore wish to do what we can to retract it. But if any one could have been behind the editorial curtain at the time, he would have understood how we were provoked to its publication. As we do not know Dr. Polk, and since charges of a grave character have been brought against him by a party, with whom also we have no acquaintance, we do not wish to appear as his champion. So far as we are concerned, then, and as no one of our subscribers seems to be in the least degree interested in the result of a personal war of crimination and recrimination, the parties con-

cerned must seek other channels than the *Monthly* for the publication of their grievances.

Regarding the *glycerite of kephaline* itself, which was the subject of Dr. Polk's article in our October number, we have heard nothing except in its favor as a therapeutic agent. That is the important fact of interest to our subscribers as physicians. The chemistry of kephaline, as given by Dr. Polk, may be faulty—we know nothing about that; but when we receive from a competent source a fair scientific criticism of its chemistry, or of its therapeutic relations—an article devoid of personal abuse or censure—we shall be glad to publish it. There is not in Dr. Polk's article, as we view it, a single sentence that should occasion the slightest ill feeling. We therefore have no regret at publishing the article in our October number.

Virginia State Board of Health.—During the late session of the Medical Society of Virginia, the retiring President, Prof. James L. Cabell, M. D., with his remarkable ability, argued the necessity of devoting our first efforts as a State profession to the satisfactory establishment and sustenance of the State Board of Health. The address was referred to a committee for consideration and report. This committee endorsed the suggestion of Dr. Cabell. Accordingly, the President of the Society, Dr. John Herbert Claiborne, of Petersburg, has appointed a committee, composed of Dr. J. S. Wellford, of this city, as Chairman, and each of the ex-Presidents, as members to urge upon the present Legislature the importance of doing something to make the State Board of Health effective. The law, as it stands at present upon the statute, is sufficient for present purposes, with the single exception of the clause which provides that the Board shall not be an expense upon the State.

The addresses of the ex-Presidents of the State Society who form the committee, with Dr. Wellford as chairman, are: Drs. Robert S. Payne, Lynchburg; A. M. Fauntleroy, Staunton; Harvey Black, Williamsburg; A. G. Tebault, London Bridge, Princess Anne county; Samuel C. Gleaves, Wytheville; F. D. Cunningham, Richmond, and James L. Cabell, University of Virginia. It is earnestly desired that all of these gentlemen will at once go to work upon the representatives of their respective sections of the State; and also, in such manner as they may deem proper, interest all others upon whom they can bring to bear their widespread influence.

But while this committee is doing its duty, as we know it will, let the profession at large rally to its support. The State Society has nearly 400 members, and at each session, with

striking unanimity, whenever the subject of the State Board of Health was introduced, each speaker and voter has pledged his work in behalf of the measure. What an influence we should have! With nearly 400 centres from which influence should radiate in our State, no measure so unanimously recommended by a competent body of citizens should fail of successful accomplishment. Failure under such circumstances is a gross reflection upon the standing and influence of our profession. Were there a political argument against such a Board, properly equipped, it might be deemed simply a misfortune not to succeed. But when this State Board of Health is urged, not only on the ground of humanity and public comfort, but is demonstrated to be a retrenchment measure as regards State expenditures, there is no political suggestion that should be more popular. The petition for a sufficient appropriation meets the issue raised by all political parties in the State, in reference to its present financial embarrassments. The Board asks, at present, for only $5,000 a year to make it efficient. This appropriation from the public treasury would result in an actual annual pecuniary saving to the State of certainly not less than ten to twenty times the amount just now asked for.

Dr. Lewis A. Sayre's Book on Pott's Disease, &c., will be issued in this country by Messrs. J. B. Lippincott & Co., of Philadelphia, instead of by Messrs. Putnam's Sons, as stated in our November issue. Messrs. Lippincott & Co. will import the book direct from Messrs. Smith, Elder & Co., of London, and will sell it at $4. This is better than having a cheap edition printed in this country without the photographs. As the sale of this book will be rapid, we would suggest that orders be at once sent to Messrs. Lippincott & Co., so that parties may be sure of getting the book on arrival in this country.

Dover's Powders Improved.—Dr. N. T. Dulaney, of Blountville, Tenn., in a private letter to us, incidentally suggests the substitution of bromide of potassium for the sulphate of potash in the manufacture of Dover's Powders. This combination, he says, has the double virtues of opium and bromide of potassium, and lessens the disagreeable effects of the opium. The bromide serves all the mechanical purposes of the sulphate of potash.

The Cincinnati Case Record Company send us for examination samples of their office and pocket *prescription blank books*, which we had occasion last year to commend. There is no reason now to change the opinion then expressed. The pocket

size contains, besides the blanks, a list of doses, relative value of decimal weights and measures, a calendar for 1877 and the first three months of 1878, a condensed list of poisons and antidotes, an obstetric calendar, blanks for bills presented and cash received, and a visiting list that is good for 31 patients a week for four weeks.

Lectures on Dermatology.—The eminent dermatologist, Dr. L. Duncan Bulkley, of New York city, will give a course of twenty-four lectures on *Diseases of the Skin* at Demilt Dispensary, corner of 2d Avenue and 23d street, New York, on Saturday afternoons, from 2 to 3 o'clock—the course to begin December 1st, 1877. Practitioners will be charged $15 for the course.

Walsh's Combined Call Book and Tablet, and his *Physicians' Handy Ledger* have been received. The former has been so often and unreservedly commended that it is unnecessary to say more of it. Price, $1.50. The *Handy Ledger* is an ingenious arrangement, and enables the physician to transfer the substance of his day book by one or two marks, in such a manner, however, as to show in detail the whole number of visits and the days when they were paid, etc. It will become the popular ledger as soon as it is generally examined. Price, $2.50.

Errata.—On page 565, 14th line, for "Langrado," read "Sangrado"; page 557, first sentence of second paragraph, read "*are potent*" for "are not potent"; in third line of third paragraph, same page, for "Cazeau" read "Cazeau*x*."

Lectures on Medical Jurisprudence.—Dr. Landon B. Edwards, in compliance with a petition of the students of the Medical College of Virginia, endorsed by the Dean of the Faculty, is delivering a course of lectures on Medical Jurisprudence in the Institution named.

The University of Pennsylvania, we are informed by the Philadelphia *Medical Times*, has 130 first course students entered for the three-year term. The success of the new plan equals the most hopeful expectations, the general paying class being quite as large as it was last year. A marked improvement in the character of the new class is also noted.

Delay in Issuing this number has been due to want of paper. The recent "flood" stopped the mills in our city, and interrupted freight communication with other cities for a season.

The January Number, 1878, of the *Monthly* will contain the *Transactions of the Eighth Session of the Medical Society of Virginia*, just as was the case last year. As this volume of *Transactions*, composed of excellent papers, will in itself make at least 200 large size pages, the number of pages of the *journal part* proper will be reduced fully one half. But whatever number of pages of the journal part may be omitted from the January issue, will be added to the February and March issues, 1878, so as to fully meet our promise of an average of 80 pages a month during the year.

Presbyterian Eye and Ear Hospital.—The Presbyterian Church in Baltimore has set the good example of establishing a free hospital for the use of all the poor of that city affected with eye and ear diseases, regardless of color or creed. This is the first Presbyterian Special Hospital in the United States. Others must soon follow in this good line of practical charity. Dr. Julian J. Chisolm, Professor of Eye and Ear Diseases in the University of Maryland, will be surgeon in charge of the hospital.

New Medical School.—Drs. T. W. Harris and W. P. Mallett will soon organize a medical school in connection with the University of North Carolina, at Chapel Hill. In the better days of the University, prior to the war, there was such a school at Chapel Hill as is now proposed to be organized there. The gentlemen having this enterprise in hand are physicians and teachers of acknowledged reputation, and an admirable opportunity will thus be afforded students who are seeking an education at the University with a view of engaging in the practice of medicine. Drs. Harris and Mallett have our best wishes for success in their laudable work.—*Maryland Med. Jour.*

State Medical Association of Louisiana.—The various medical associations throughout the State of Louisiana, and the regular physicians interested in the subject who are not members of any association, are called upon to send delegates to New Orleans, to meet at the Medical Department of the University of Louisiana, at 12 o'clock, Monday, January 14th, 1878, for the purpose of organizing a State Medical Society. The measure proposed cannot be too strongly commended. It is a great misfortune to any State to be without its State Medical Society.

Gynæcological Transactions, Volume II, is announced as published by Messrs. Hurd & Houghton, of New York, December 1st, 1877. This volume will contain twenty-seven articles by as many of the most prominent of the gynæcologists of this country. The price will be $6. Subscribers to Volume II will receive Volume I at $4, if they wish it.

Miscellaneous.

Treatment of Pott's Disease of the Spine.—There will appear in the January number of the *Richmond and Louisville Journal* a very complete vindication from Dr. Lewis A. Sayre, in regard to the foul aspersions that have been cast on his personal and professional character, in connection with his treatment of Pott's disease of the spine. It will be remembered that it has been claimed by Dr. Joseph Bryan, of Lexington, Ky., and by his friends for him, that he, Dr. Bryan, had ante-dated Dr. Sayre in the use of the plaster-of-paris splint in the treatment of Pott's disease of the spine. Without going into details at the present time, it is only necessary to say, in behalf of Dr. Sayre, and in the cause of truth and justice, that there will appear in Dr. Sayre's vindication two very important letters; one from Dr. Geo. A. Van Wagenen, of Newark, N. J., and one from Dr. S. B. St. John, 214 West Forty-third street, New York. Dr. Van Wagenen, in his note of November 3, 1877, states that during his service in Bellevue (extending from April '71 to April, '72), he applied, in accordance with Dr. Sayre's minute instructions, the plaster-of-paris bandage on a child in Ward 30, second Surgical Division of the Hospital mentioned, and he is quite sure that this case is not the only one that was similarly treated for the same disease. Dr. St. John, in his letter of the 12th of November, 1877, writes that in an article contributed by him to the *American Journal of Medical Sciences*, July, 1872, he describes his application of the plaster-of paris apparatus in the treatment of caries of the spine, according to the advice of "another surgeon." In his note of November, 1877, he states that the surgeon to whom he alludes is Dr. Lewis A. Sayre, of New York; that the patient was one entrusted to him by Dr. Sayre; that the method of application was explained to him by Dr. Sayre; and that he further, in his article, suggested the method of treatment by extension, as described by Dr. Sayre. The case thus treated by Dr. St. John was one of Dr. Sayre's. It will be remembered that Dr. Bryan does not pretend that he ever treated a case by this method before August, 1874, while two of Dr. Sayre's pupils, Drs. Van Wagenen and St. John, had thus treated cases according to Dr. Sayre's instructions from one to two years previously. Dr. Sayre further shows in his article that at the time (August, 1874) Dr. Bryan treated his case at Bellevue Hospital, he, Dr. Sayre, was not connected with the Hospital; further, that he was absent from the city, and that the physicians to whom Dr. Bryan showed his case assert that they never alluded to this case in their conversation with Dr. Sayre. Dr. Bryan, in a letter to Dr. Sayre of May 29, 1876, and now

before the public, uses this language: "I have never seen your turtle-shell splint," while Dr. Bryan's associates in the hospital testify that this splint was frequently used in the hospital, and was quite familiar to the hospital staff. The *Lexington Daily Press*, published at Dr. Bryan's home, stated in one of its issues last spring that "in the other instances the splint (used by Dr. Bryan) was applied with remarkable success," while Dr. George T. Bates, 161 West Twenty-third street, New York, testifies that he was Dr. Bryan's assistant, and that the splint was used by Dr. Bryan in only one other case.

The *Lexington Daily Press* further says; "Dr. Bryan made no publication of his discovery; he intended to watch the effects still further and note many cases before giving his observations to the world." Dr. Bryan, in his letter of May 29, 1876, to Dr. Sayre, says in regard to his claims of having ante-dated Dr. Sayre: "I forgot all about it," and he could not, therefore, have been very much interested in noting the "many cases" alluded to by the *Lexington Press*.

In his note of March 15, 1877, he uses the following language: "It (plaster-of-paris splint) has been used here by a physician in one case;" so it is very evident that in the interval elapsing between May, 1876, and March, 1877, the "many cases" amounted to one, with which Dr. Bryan had no connection whatever. Perhaps the most offensive part of Dr. Bryan's claim in his recent publications, direct or vicarious, has been that he was infamously treated by Dr. Sayre, and that Dr. Sayre had done him the grossest injustice. In his note of March 5, 1877, to Dr. Sayre, he uses the following language: "I am not in position to decide whether you have done me perfect justice in regard to the plaster-jacket in your *book*. *Elsewhere, as far as I am able to judge, you have given me all the credit due me.*"

As Dr. Sayre published Dr. Bryan's letter in his book, giving all the facts and the claims of Dr. Bryan, the public can judge whether justice was or was not accorded him in the book.

Very pointed allusions have been made by Dr. Bryan and his friends to the fact that while he, Dr. Bryan, was entitled to all the credit for the use of this splint, Dr. Sayre was in London "robbing a young practitioner of the honors he had fairly won." In reply to this infamous charge, it is only necessary to quote the concluding sentence of the letter already alluded to, which Dr. Bryan addressed to Dr. Sayre as recently as March 5, 1877: "Hoping you will succeed in your endeavor to popularize the splint, and in the end, get physicians to apply it properly, I remain your affectionate pupil and friend, Joseph Bryan."

Whether Dr. Bryan ante-dated Dr. Sayre in the use of the splint mentioned, the letters of Drs. Van Wagenen and St. John

fully explain; and whether Dr. Sayre has been unkind or unjust to Dr. Bryan, Dr. Bryan's letter of March, 1877, also fully explains. What truth and justice demand in this case the profession will find no difficulty in determining.—*American Medical Bi-Weekly*, December 8, 1877.

The Efforts of China to Suppress the Opium Traffic.—One of the most remarkable chapters in the history of civilization is the persistent efforts of the Chinese government to prevent the importation and use of opium among its people.

Over a century ago the government recognized the dangers following the use of this drug, and began to legislate against it, punishing the offenders with banishment or strangulation.

The opium was grown in India, and smuggled into China by English ships, encouraged by the English government, and the sale and demand constantly increased. Year after year the Chinese officials made frantic efforts to check this evil. Opium was contraband, and all who were found smoking or using the "black dirt" (as they contemptuously called it) were punished with death or perpetual servitude. This trade brought an increasing revenue to the English government, and they determined to force its sale on the Chinese, which was stubbornly resisted for a long time, until finally it culminated in a war (1830), which Mr. Gladstone denounced as one calculated to cover the country with permanent disgrace. The Chinese were disastrous, but nothing definite was gained beyond the forced privilege to bring in opium by the English

In the meantime the growth of the poppy in China increased in spite of all legislation to the contrary, and the demand increased, nearly doubling in ten years.

In 1857, another war was provoked by England, which was literally the great struggle of a pagan nation to save itself from the curse of opium, which the rapacity of English civilization sought to force upon it for the mercenary purpose of increasing its Indian treasury.

The Chinese failed, and yielded to the pressure to admit opium at a fixed duty, which they have several times sought to raise, but the English government has always refused. A new proposal has been made to England this year to increase the duty, and the decision of the government is anxiously watched.

The extent to which opium is used may be realized from the fact that the importations from India for 1876 amounted to over seven millions of pounds; to this may be added over a million more pounds raised in the country.

It is estimated that no less than six millions of people both chew and smoke this drug constantly.

If these figures are correct, we cannot wonder that the Chinese government are alarmed, and have at last determined upon a new movement for "stamping out" this terrible evil. An edict has been issued forbidding the culture of the poppy after 1879, in any part of the kingdom, and prohibiting all importation after 1880; also an edict has been sent to all the governors and leading generals of the provinces, requiring them to submit plans of laws, which shall become a law, and effectually do away with the use of opium, under pain of death, after a period of three years.

The *denouement* or result of this wonderful struggle will be one of the great events of the century. The sagacity of the Chinese officials in recognizing the fatal effects of the introduction and use of opium, and in persistent opposition, extending over a century, furnishes a lesson to our boasted civilization which we cannot afford to lose.

In this country we are just beginning to realize the necessity of some legislation that shall control the abuse of opium and its compounds, and no one dare deny that the same peril which the Chinese discerned a century ago may not threaten us to day.—*Quarterly Journal of Inebriety*, Dec., 1877.

Inebriates Not Eligible as Voters.—In France, notwithstanding so many persons believe that wine-drinking prevents drunkenness, they have seen the need of passing the following law: That every one condemned twice by the police for the crime of open drunkenness, is held to be incapable of voting, of elective eligibility, and of being named for the jury or any public offices.—*Quarterly Journal of Inebriety*, Dec., 1877.

Obituary Record.

Dr. Joseph E. Dulaney, died in Blountville, Tenn., his native place, September 8th, 1877, aged 47 years. He was a graduate of the Transylvania University, and also of the Medical Department of the city of New York. During the late war he was Surgeon of the Nineteenth Tennessee (Confederate) regiment, and was very popular with his command, as with all who knew him. He was the first President of the Bristol Academy of Medicine (1874). He leaves a widow and three children.

Mrs. Fannie Marion Gregory, wife of Mr. Charles S. Gregory, of New York city, and daughter of Dr. J. Marion Sims, died at her home October 26th, 1877.

Louis A. Sayre M.D.

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Original Communications.

ART. I.—*Biographical Sketch of Lewis Albert Sayre, M. D.*, Professor of Orthopœdic Surgery in Bellevue Hospital Medical College, City of New York.

This eminent physician and surgeon was born at Bottle Hill, now Madison, Morris county, N. J., February 29th, 1820, of Revolutionary stock—his grandfather, Ephraim Sayre, having been quartermaster in the army under Washington. Dr. Sayre was the son of Archibald and Martha Sayre, and received his early education at Wantage Seminary, Deckertown, Sussex county, N. J., under the tuition of Edward A. Stiles, an accomplished scholar and graduate of Yale. At the age of ten, he was taken to Kentucky by his uncle, David A. Sayre, of Lexington, and there educated at Transylvania University under the presidency of the late Lewis Marshall, from which he was graduated at the age of 19. His uncle designed him for the church, but having a strong and decided preference for the profession of medicine, he left Lexington and came to New York, where he entered the office of Dr. David Green, St. John's Park, N. Y., with whom he commenced his medical studies. Dr. Green was a clear-headed, practical man, and had an immensely large practice, much of it among the poor of the city, which afforded a fine field for clinical observation and the study of disease and its treatment. This was improved by the young student, giving him thereby a large amount of practical experience.

Dr. Sayre entered the College of Physicians and Surgeons, in the city of New York, then under the Presidency of John Augustine Smith, M. D., and was graduated from that institution in 1842. His thesis upon *Spinal Irritation* attracted much attention, and was published in the *Western Journal of Medicine and Surgery*, 1842, edited by Drs. Lunsford P. Yandell and Daniel Drake. He was appointed in the same year Prosector to the Professor of Surgery, Dr. Willard Parker, College of Physicians and Surgeons, which position he held for the period of ten years, when finding his practice too large to enable him to perform the duties of the office properly, he resigned in July, 1852, and was appointed by Dr. Parker, Emeritus Prosector in the same institution.

His first paper contributed to the profession was published in the *Transactions of the Society of the Alumni of the College of Physicians and Surgeons*, and entitled *Case of Abscess from Pneumonia of the Left Lung, terminating favorably by forming a Fistulous Opening between the Third and Fourth Ribs, and an Abscess in the substance of the Lung.*

At the close of this paper we find the following query: "In an abscess of one lung, if we could accurately diagnosticate that the other was in a perfectly healthy condition, might we not puncture the thorax and collapse the diseased lung, with some prospect of success in gaining an adhesion of its walls? Or in empyema of a tuberculous patient from the rupture of an abscess into the pleura, would we not be justified in tapping as soon as discovered?" Oct. 18th, 1842. When we remember that this was in 1842, and before auscultation was as thoroughly taught as at present, and paracentesis thoracis was not so commonly practised as it has been since the valuable papers of Dr. Bowditch, of Boston, we see the clear evidence of an original mind and independent thought: and the suggestions here thrown out have since been proved to be practically correct by the most valuable paper of Professor Austin Flint in Dr. Seguin's *Clinical Lectures.*

From that time he contributed largely to the profession the results of his experience, furnishing his cases either to the Pathological Society of New York, the *Journal of Medicine*, New York, the Medical Society of the State of New York, the

American Medical Association or Clinical Lectures. The following are some of the most prominent: *Chorea Induced by Mental Anxiety; Cases of Chronic Abscess in the Cellular Tissue of the Peritoneum; Spina Bifida, Tumor Removed by Ligature; Case of Perforation of the Rectum, followed by an extensive Recto-Fœcal Abscess, and Caries of the Coccyx and Sacrum; Exsection of the Head of the Femur, and Removal of the Upper Rim of the Acetabulum for Morbus Coxarius; New Operation for Artificial Hip Joint in Bony Anchylosis; Report on Morbus Coxarius; Treatment of Croup by Inhalation of Steam; Lead Palsy from the Use of a Cosmetic (Laird's Bloom of Youth); Mechanical Treatment of Chronic Inflammation of the Joints of the Lower Extremities; Partial Paralysis from Reflex Irritation, caused by Congenital Phimosis; A Simple . ressing for Fracture of the Clavicle; On Anchylosis; Report on Fractures; Clinical Lecture on Diseases of the Hip Joint; Spinal Anœmia with Partial Paralysis, and Want of Co-Ordination from Irritation of the Genital Organs; Report on Pott's Disease, or Caries of the Spine, Treated by Extension and the Plaster of Paris Bandage.* The profession is indebted to Dr. Sayre for some of the most simple and efficient surgical instruments required by the numerous remarkable cases that have come under his observation and practice, among which are the "uvulatome," "scrotal clamp," "club-foot shoe," "flexible probe," "improved tracheotomy tube," splints for extension of the hip, knee and ankle joints in chronic diseases, which enable the patients to exercise in the open air. But most of all for his recent suggestion of the use of plaster-of-paris in the treatment of spinal curvatures.

Dr. Sayre was appointed Resident Physician of the city of New York, and sent a most able report to the Commissioners of Health, January 4th, 1866, in which he proved conclusively that cholera was at least a *portable*, if not a *contagious* disease; and as true as Asiatic cholera never originated in this country, it could only reach here by importation, and therefore could be effectually prevented by efficient national quarantine regulations along the entire coast. He also made a most valuable paper upon compulsory vaccination, believing that the disease could be prevented by efficient and continued vaccination, and thus be

eradicated. His numerous reports to the Board of Health on sewerage, drainage, and the proper construction and ventilation of tenement houses, were of great value, and are evidences of his intimate knowledge of hygiene; and had his suggestions been carried out would unquestionably have been of inestimable value to the city.

Dr. Sayre has occupied the position of Professor of Orthopœdic Surgery and Clinical Surgery in Bellevue Hospital Medical College, New York city, from its organization in 1861 to the present time, and the large classes of not only students but medical men from all parts of the country who throng his lecture-room, is the strongest proof of his ability and power as a teacher. His opportunities for observation have been unsurpassed, and he has utilized them to the utmost in his teachings and practice. His style as a speaker and writer is terse, vigorous, and abounds with practical observations. There is something stalwart and intense in his manner and methods of illustration, while in practice he is always animated by the keenest sympathy and tenderest feeling for his suffering patient. Dr. Sayre does nothing at hap-hazard; all is carefully and thoughtfully planned beforehand; and he therefore rarely fails in diagnosis, prognosis, or treatment. His practice is very large, and his influence in the profession is far-reaching, useful and eminently beneficent. Dr. Sayre has two sons, Charles H. H. and Lewis Hall Sayre, in the profession, who promise to become eminent.

Dr. Sayre has also published a work upon the treatment of club-foot, which is highly esteemed. His work on Orthopœdic Surgery is unquestionably the leading authority upon that branch of surgery. The late Dr. Paul F. Eve, in his address upon surgery before the International Medical Congress held at Philadelphia, 1876, says: "Dr. Sayre has done more on this subject than any other American. His work just published is undoubtedly the best ever issued from the press."

Dr. Sayre received also recognition of his services abroad, having been decorated with the order of Wasa by Charles IV, of Norway and Sweden, in 1872, for his advice in the case of one of the Royal family, where his knowledge of joint diseases proved most valuable, and for his contributions to science.

The method of treatment of Potts' disease and lateral curvature of the spine which he has perfected and recently published, by suspension of the body and application of plaster of paris bandages, creates a new era in this department of surgery, as stated by Dr. Post, of New York, and the British medical journals, and will prove an inestimable boon to future generations.

Dr. Sayre was appointed by the American Medical Association a delegate from that body to the British Medical Association, which met in Manchester in 1877. While in London he was invited to lecture upon his new method of treatment, and demonstrated at University College Hospital, Guy's, St. Bartholomew's, St. Thomas', National Orthopœdic, and Royal Orthopœdic Hospitals. He also visited, by invitation, Liverpool, Birmingham, Cork and Manchester. At the meeting of the society his teachings were received with the warmest enthusiasm, and a vote of thanks passed without a single dissenting voice. While abroad, he prepared an *Illustrated Treatise on Spinal Disease and Lateral Curvature*, which he dedicated as follows: "To the British Physicians and Surgeons who have received me with such great personal and professional cordiality; who have thoroughly scrutinized the merits of this plan of treating diseases and deformities of the spine, and given me abundant opportunities of publicly testing its practical value, this small manual of the details of treatment is gratefully inscribed by The Author."

On this trip, Dr. Sayre was accompanied by his son, Lewis H. Hall Sayre, M. D., who rendered him most valuable assistance at all his demonstrations, and made for himself hosts of warm and valued friends amongst the eminent men of the profession.

As an author, Dr. Sayre's influence will increase with time, and he will be studied as an original authority by generations of students yet unborn.

Cota Bark in Diarrhœa and Rheumatism.—This new bark, from Bolivia, is said, by Professor Giete, of Munich, to be a specific against diarrhœa in its most diverse forms. He administers it in doses of 0.5 gramme of the fine powder four or six times a day. Of the tincture, he usually gives ten minims every two hours. In Bolivia, whence the plant was sent, it is regarded as a remedy against rheumatism and gout.

ART. II.—*Hysteria—Its Characteristics when Simulating Organic Diseases of the Nervous System.** By WILLIAM C. DABNEY, M. D., Charlottesville, Va.

There are few affections more frequently encountered by the general practitioner than hysteria; and so varied is it in its manifestations, and so closely does it often resemble organic affections of various parts, that a knowledge of its diagnosis, prognosis and treatment becomes of the utmost importance.

It would be well nigh impossible, within any reasonable limits of time and space, to consider the various forms which hysteria may assume. I shall confine myself in the present article to a consideration of the characteristics of the affection when it simulates organic diseases of the nervous system. This applies especially to what we shall have to say with respect to diagnosis, for the causes and *general* treatment are the same whatever form the hysteria may assume.

It will be convenient to consider the subject under the following headings: Varieties, causation, symptoms and diagnosis, prognosis, and treatment.

Varieties.—Hysteria simulating organic diseases of the nervous system may be divided into psychical, motor and sensory. In the first (*psychical variety*), as the name implies, the mental disturbances are the chief and only symptoms. In the second (*motor variety*), the muscles are the parts chiefly disturbed, and there may be either paralysis or convulsions. In the third (*sensory variety*), the most prominent symptoms are due to the disturbances of sensation, which may be either increased or diminished.

Causation.—With respect to *causation*, it is well known that *sex* is a most important factor, the disease being very much more common in women than in men. Indeed, among the latter it is comparatively rare.

*This excellent practical paper, from one of the most careful observers in medicine anywhere, was presented during the session of the Medical Society of Virginia, 1877. The Publishing Committee allow it to pass out of their hands only upon condition that the *Monthly* will publish it in the January number, 1878, which number contains the volume of *Transactions* of the Society for 1877. The editor of the *Medical Monthly* is grateful, both to the Publishing Committee and to the author of the paper, for allowing him the use of the paper in his columns. This paper admirably succeeds the more historic and equally interesting one on the same subject in our December No., 1877, by Dr. John C. Peters, of New York city.

Age plays a most important part, the affection being far more common between the ages of fifteen and twenty-five; though it is by no means uncommon to see well-marked hysteria in women much more advanced in life. Dr. Robert Lee* states that it is never seen before the age of puberty; but this is unquestionably a mistake.†

In July, 1876, I saw a little girl ten years of age, the daughter of a physician, who was suffering with great pain at the external meatus urinarius. There was nothing apparent to sight or touch which could account for her sufferings. The urine was normal in every respect, except that it was of very low specific gravity, and large quantities were passed at short intervals. The pain came on suddenly and disappeared in the same manner. It was not increased by urination, but soon after it passed off there was an abundant flow of limpid urine. This continued for about a week, when the pain disappeared from the meatus and attacked the thighs, coming and going in the same irregular manner. Dr. S. Weir Mitchell, of Philadelphia, who was consulted by letter with respect to the case, pronounced it one of hysteria. The patient was sent away from home, and never had an attack afterwards till the following year, when there was a return of the symptoms. She was again sent away, and up to the present time has had no return. In this case, there was no appearance whatever of approaching puberty.

The influence of *hereditary tendency* has often been remarked. In the same family are often found various forms of nervous affections. For instance, in one family of my acquaintance, the father and mother were apparently free from any marked nervous trouble. There were seven children in the family. Of these, one daughter was an epileptic; a son and a daughter were each hysterical to a very marked degree, both suffering often from hysterical convulsions of a very violent character, which could be controlled in the lady by pressure over one of the ovaries, which was sensitive on pressure; another daughter also had hysterical attacks, though, so far as I know, she never had convulsions. In another family, the mother had violent attacks of hysteria; one son was idiotic; two others had well-marked hysteria; another had spinal irritation of a very aggravated form, and the only daughter had hysterical convulsions. In-

**Transactions Royal Med. and Chir. Society*, 1870.

†See article by Dr. Jacobi, of New York, in the *American Journal of Obstetrics, &c.*, for February and May, 1876.

stances of the kind might be multiplied, but the factor in the etiology of hysteria is so well recognized that it needs no further comment.

Two of my patients who suffered from hysteria of a very violent form, had *lateral curvature* of the spine. One of these patients, a young man, about twenty-two years old, whom I saw with Dr. J. E. Chancellor, of this place, had well-marked hysterical convulsions. He had suffered from syphilis a few months previously. Since March, 1876, he has had no return of hysterical symptoms. The other patient was a lady about fifty years of age. Her attacks were of the nature of hysterical coma. Her heart's action was at all times exceedingly feeble, and from her deeply-notched incisor teeth I suspected hereditary syphilis. One of this lady's daughters is also hysterical.

Uterine and *ovarian* affections are generally associated with hysterical manifestations in women, and many physicians, as is well known think the affection always due to some uterine or ovarian trouble. There can be no doubt that such a connection very frequently exists, but cases occasionally occur, even in women, when to all appearance the sexual organs are perfectly healthy.

Dr. Sinéty* reported a case to the Société Anatomique on the 10th of November last, in which a young woman, twenty-one years of age, had suffered from hysterical convulsions, which were easily controlled by pressure over the right ovary. The patient died from phthisis. At the autopsy, the uterus was found in normal condition; the ovaries were normal in size and position, but on the right side there was a small body situated on the round ligament near the ovary, and similar to the latter in all respects. In point of structure the ovaries differed materially from their normal condition in women of this age. There were no Graafian follicles, and no appearance which would denote that there had ever been a rupture of one, and the consequent discharge of an ovum. The woman had menstruated regularly to within a short time of her death.

It is not to be inferred from this case, however, that there is a necessary connection between the faulty development of the ovaries and the hysteria. In one of the worst cases I have ever seen, the lady bore children very regularly at intervals of

*Le *Progrès Medical*, February 10th, 1877.

about eighteen months; and while, as a rule, hysterical women are barren, quite a number of cases have been reported where they bore children regularly and at short intervals.

Mr. Skey was of opinion that *debilitating influences* were instrumental in producing hysteria. But women thus affected are are often well-nourished, and seem to have considerable strength. They often show a decided tendency to take on fat. For example, one of my patients, a young married lady, aged twenty-one, who suffered from hysterical convulsions, weighed over 200 pounds; and another patient, now under treatment, thirty-six years of age, who also suffers from hysterical convulsions, weighs about 180 pounds.

It is generally thought that persons in the upper walks of life, who are not accustomed to work, and have nothing to occupy their attention, are more liable to hysterical affections than their less fortunate neighbors. But this rule is not strictly true, for it is by no means unusual to see most aggravated cases in negroes. Nothing, indeed, is more common in our Southern country than to see, during a religious revival, several swarthy dames or damsels on the church floor in strong convulsions.

With respect to the exciting causes of an hysterical outbreak, the most prominent, perhaps, is witnessing a paroxysm in some other person. Any *strong emotional disturbance*, however, such as grief, joy or fear, may be attended by similar consequences.

Diagnosis.—The *diagnosis* of hysterical affections is frequently easy enough, but at other times it becomes exceedingly difficult. Especially is this the case when the attacks simulate organic diseases of the nervous centres. A diagnostic point on which much stress is laid by Charcot is the presence, when the patient is a female, of *ovarian tenderness* on the same side with the paralysis, hemi-anæsthesia or spasm, as the case may be. This is doubtless a very significant symptom in many cases, but it is certainly absent in some which are undoubtedly hysterical; and, on the other hand, it is present in some cases of central disease. Dr. Charlton Bastian* calls attention to this latter fact, and warns against being mislead by the ovarian tenderness. A case of this description will be detailed further on when we have considered other diagnostic points.

**Paralysis from Brain Disease*, p. 65.

In paralysis from brain disease the *temperature* is usually markedly affected, while this is not the case in hysterical paralysis. The temperature, however, will not furnish conclusive evidence on this point. M. Pitrés* has recently reported several cases of paralysis from brain lesions, verified by *post mortem*, in which the temperature was unaffected. We may mention here, incidentally, that an analysis of the cases of cerebral paralysis thus far reported, in which the temperature was unaffected, shows that the lesion was confined to the cortex. The reverse, however, does not hold good, for cortical lesions are frequently followed by fever. With reference to hysteria, too, some very aggravated cases are accompanied by a slight rise of temperature.

A very remarkable case of hysteria *simulating locomotor ataxia* has been reported by Dr. W. H. Webb,† in which the temperature rose to 100° F. In this case the diagnosis was made by Da Costa, and there can be no doubt as to its correctness.

Charcot‡ mentions among the characteristic features of hysterical hemi-anæsthesia, *coldness and pallor* of the anæsthetized parts; so great, indeed, is the bloodlessness that he states it is frequently difficult to draw blood by the prick of a needle. Although he makes no positive statement to this effect, it is reasonable to suppose that the temperature would be considerably lowered on the anæsthetized side under these circumstances.

M. Briquet claims that hemi-anæsthesia of cerebral origin rarely affects the face; and in the very few instances where it does, it is always on the opposite side to the affected limbs, while the reverse holds true with respect to hysterical hemi-anæsthesia. And this statement has been reproduced by Lebreton§ within the past few years. Charcot, however, whose experience gives him the right to speak authoritatively on this subject, states that "in certain exceptional but well-authenticated cases, certain localized cerebral lesions have caused hemi-anæsthesia precisely similar in all respects to that due to hysteria."‖

Le Progrès Medical.
†*American Journal Med. Sciences*, January, 1876.
‡*Leçons sur les Malad es du Systeme Nerveux.* tome 1, p. 303.
§*Des Différentes Varieties de la Paralysis Hysterique*, 1868.
‖*Op. cit.*, p. 306, tome 1.

A diagnostic point of considerable value is the *absence of wasting* to any considerable extent in hysterical paralysis. It is true that after prolonged disease from any cause, the muscles waste somewhat; but it is remarkable how long they retain their contractile properties in cases, when to all appearance, their functional activity is entirely lost.

A feature occasionally observed in hysterical paralysis of long standing, and which was utilized for diagnostic purposes by Dr. Da Costa in Dr. Webb's case, to which we have previously alluded, is the *failure of the muscles to respond* to the interrupted current.

Bauday* mentions, as one of the characteristic features of hysterical paralysis, its being usually limited in extent; but this can scarcely be considered a sign of much diagnostic value, for numberless cerebral monoplegiæ have recently been reported by Charcot and Pitrés,† and others, which were verified by autopsies; and I have myself recently seen such a case where the result showed, beyond question, that there was a cerebral lesion.

The "superficiality" of the paralytic symptoms, upon which also Bauday lays much stress, cannot be considered at all characteristic. It is very frequently observed in the different monoplegiæ, and it is not unusual to see a hemiplegia which is slight or "superficial," and of short duration. Dr. Mitchell considers these due to plugging of small vessels supplying the striate bodies. The following may be taken as a type of cases of this character:

A physician, about fifty years of age, who had in early life been rather addicted to drink, and had a chancre when about twenty-five, was sitting at breakfast one morning when he suddenly lost the use of his right arm. On attempting to rise from the table, he found that the leg on the same side failed to respond. There was no aphasia, and no difficulty in speech or deglutition. He was moved in his chair to the adjoining room, and by midday was able to walk about the house. The next day he walked in the garden. He had a slight return, however, that day, but in a few days was in his usual health. I advised the use of strychnia and phosphorus, with a liberal diet. Dr. Mitchell was subsequently consulted by the gentleman, and pronounced the case one of cerebral hemiplegia, due to the plugging of one or more of the small arteries of the striate body.

**Diseases of the Nervous System*, p. 251.
†*Revue Mensuelle de Medicine et de Chirurgie*, May, 1877.

M. Charcot has also pointed out that these monoplegiæ of short duration are frequently of syphilitic origin, and he gives a most interesting case of the kind.*

Todd, and subsequently Charcot, and numerous other writers, have called attention to the fact that in hysterical hemiplegia, facial paralysis is invariably absent. There may be, it is true, paralysis of certain of the facial muscles due to hysteria, but the best authorities agree in the statement that it is never an accompaniment of hemiplegia. The following case, to which I have already alluded in connection with ovarian tenderness and paralysis of limited extent, is of interest. Although aware of Charcot's and Todd's views, I was led into error in this case by the superficiality and short duration of the attacks of paralysis, and the existence of ovarian tenderness, as well as by the previous history of the case.

A lady, about 47 years of age, was taken suddenly while sitting at dinner on May 6th, 1877, with numbness and loss of power in her right arm and hand. This lasted a few hours and then passed off entirely. A similar attack, but of shorter duration, occurred during the night. I saw her at 3 P. M. on the 7th. She could then use her right hand, but complained of numbness in it. Her voice was a little thick; there was no aphasia, and she seemed at no loss for words. I was with her for about two hours, and during this time she had several attacks, in which she was not unconscious, but could not speak, and her right arm was entirely powerless. Her face was drawn strongly to the left side, and considerably flushed. Temperature normal on both sides Pulse rather weak, but this I learned was always the case. *Her husband informed me that she had suffered from similar attacks at intervals for years past.* There was tenderness on pressure on the right ovarian region, and I heard subsequently that she had a uterine fibroid, for which she had been treated by Dr. Emmet, of New York. She had never borne a child at term, but had had *nine* abortions and miscarriages. She had never had rheumatism, but members of her family were gouty, and her father had died of apoplexy. I considered the case one of hysteria, and gave a favorable prognosis.

On the 9th, I again saw her. She was then completely paralyzed in the right arm, was aphasic, and swallowed with difficulty. Her face was *not* paralyzed.

On the 11th, her condition was much the same. She could

Op. Cit., tome 1, p. 359, 1877.

walk with ease, and there was no facial paralysis. Dr. W. C. N. Randolph, her family physician, now took charge of the case, and I did not see her again. I learn from him that she continued in much the same condition till May 27th, when after a drive of a mile or two she had a much more severe attack—the leg and face on the same side being also paralyzed. Sensibility was not affected. Dr. Randolph informs me that cerebral meningitis came on soon after this time, and Mrs. —— died on the 10th of June.

It would be out of place to speculate on the cause of the monoplegia in this case. The history shows quite conclusively that the lesion was situated in the neighborhood of the fissure of Rolando, and in the cortex of the cerebrum, and that the case was not one of hysteria as I had at first supposed Dr. J. S. Davis, of the University of Virginia, Dr. W. C. N. Randolph, of Charlottesville, and Dr. R. L. Hoard, of Albemarle co., also saw her in this attack, and considered it one of hysteria.

I have previously referred to the statement of Charcot, that in certain cases, it is impossible to make a diagnosis between hysterical and cerebral hemi-anæsthesia. Within the past few months, however, a most singular means of differentiating between these two forms of anæsthesia has been discovered. It consists in the application of little pieces of certain metals to the anæsthetized surface. This mode of treatment for anæsthesia was proposed so long ago as 1849 by M. Burcq, but his claims were then treated as the "baseless dream of a diseased imagination," and have only been verified during the present year. It is unnecessary to go into a description of "metallotherapie" in this paper. Most of the American and English journals have published articles in regard to it, and the writer has published an abtract of all as yet known on the subject in the *Virginia Medical Monthly* for August, 1877, under the head of "Translations from the French and German."

Apropos of our present subject, it has been found that in hysterical anæsthesia, just in proportion as there is a return of sensibility on the affected side, there is a *loss* or *diminution* at corresponding points on the healthy side, while this transfer of sensibility is *never* observed in cerebral hemi-anæsthesia. This opinion is held by Charcot, Raynaud, Luys, and others;* but the

Le Progrès Médical, Nos. 3, 4, 5. 6, 7, 8, 12, 16, and 20, 1877; and *La Tribune Médicale* February 25th and March 4th, 1877.

material seems as yet insufficient for the formation of a fixed and definite opinion as to the value of this means of diagnosis.

In conclusion, so far as diagnosis is concerned, it will be observed that I have said nothing about the hysterical constitution, of which so much has been written. Doubtless this, when taken in conjunction with other circumstances, will furnish valuable evidence; but the mere tendency to emotional disturbances without adequate cause is not of itself conclusive proof that we have to deal with a case of hysteria. Charlton Bastian* states that a tendency to laugh and cry without apparent cause is frequently observed after lesions of the pons varolii.

So far as I know, the ophthalmoscope has never been employed for purposes of diagnosis in hysteria, and it is not likely that the condition of the retina would be at all characteristic; nor would the absence of all abnormal appearances about the fundus of the eye be conclusive evidence that no intra-cranial trouble existed. In two cases of hysteria—one of hysterical catalepsy, and the other of hysterical convulsions—which I have seen (both in consultation with Dr. J. E. Chancellor, of Charlottesville, Va.), the fundus presented no abnormal appearance, except, perhaps, a slight congestion of the disk.

Prognosis.—With respect to *prognosis*, but little need be said. It is well known that, in nearly every case, the danger to life is almost *nil.* It is well known, too, that recovery in cases apparently desperate may occur even after long periods of time. A case is recorded by Bourneville,† in which complete recovery took place in three-quarters of an hour after paralysis, and contraction had lasted for *nine* years. Charcot‡ has called attention to the fact, however, that after hysterical paralysis has lasted for a long time, sclerosis of the lateral columns of the cord may supervene; and it is necessary, in view of this, to be very guarded in expressing an opinion in cases of long-standing hysterical paralysis with contraction. The prognosis is much more favorable when there is no tendency to nervous affections in the family. My own experience leads me to the belief, furthermore, that while attacks of hysteria are much harder to relieve in *men* than in women, they are much less liable to recur

**Paralysis from Brain Disease.*
†See *Charcot. Op. cit.*, tome 1, Deuxieme edition, p. 357—*note.*
‡*Op. cit.*, p. 361.

when once controlled. Writers do not say anything about this when speaking of prognosis, but a number of physicians with whom I have conversed have come to conclusions similar to my own.

A case of spasmodic ileus due to hysteria which terminated fatally, was reported to the Société de Medicine in December last by M. Voisin.* It occurred in the person of an hysterical girl. She had three attacks, of which the first two were relieved by anti-spasmodics and purgatives; the third proved fatal. The autopsy showed that there had been only a *spasmodic* stricture of the intestines.

Treatment.—We come, in the last place, to consider the *treatment* of hysteria. It has been wisely remarked that the number of remedies which have been proposed for any disease are in direct proportion to the powerlessness of all remedies to cure that disease; and, judged by this standard, one would conclude that hysteria is a most unmanageable affection.

The various remedies may be divided into two classes, as they are given to relieve the paroxysms themselves, or to remove the tendency to such paroxysms.

To remove the tendency to hysterical attacks, and to cure those cases which are of long duration, and not accompanied by any sudden or violent manifestations, *tonics*, such as quinine, iron, strychnia, zinc, phosphorus, cod liver oil, arsenic, &c., have been largely used.

Mr. Skey† placed the preparations of bark in the front rank. Exercise in the open air, especially on horseback, he justly considered of the greatest benefit.

A combination of the remedies just mentioned may frequently be used with advantage. A prescription which I have found exceedingly serviceable, is the following:

℞ Tinct. cinchona bark.....f℥ii
Tinct. nux vomica
Dilute phospnoric acid, $\bar{aa}$ f℥ss—Mix.

S. One teaspoonful three times a day.

When iron is needed, the bitter wine of iron may be substituted for the tincture of bark, and when deemed advisable Fow-

Gazette Medica e de Paris, December 16th, 1876.
†*Lectures on Hysteria.*

ler's solution of arsenic may also be added. In other cases, I have given phosphide of zinc and extract of nux vomica with very happy effect, when the combination just mentioned had either failed to give relief or had lost its effect. One of my patients, a lady with lateral curvature of the spine, to whom I have before alluded, and who has been an invalid for many years, has obtained very great relief from the use of these remedies, sometimes using one prescription, and sometimes the other. When there is ovarian tenderness, I have obtained more benefit from the use of *suppositories* of *belladonna* inserted into the vagina than from anything else. In a very aggravated case of hysterical catalepsy which I saw some years ago, and in which the attacks had recurred every few days for several years, speedy, permanent relief was obtained by the combined use of belladonna suppositories and the bark, strychnia and phosphorus. *Electricity* has been highly recommended for hysterical paralysis—the interrupted current being passed through the affected muscles. In hysterical anæsthesia, the wire brush has been found very serviceable. Tanner* states that he has never failed to cure hysterical aphonia by electricity. One pole of a faradic battery is placed in the patient's hand, and with the other the physician touches the tongue. The scream which follows terminates the aphonia.

Metallo-therapie for hemi-anæsthesia was mentioned when speaking of diagnosis, and will not be again referred to.†

In cases of spinal irritation, which many writers (Bauday, Bastian, and others) consider a form of hysteria, the passage of the galvanic current up the spine is recommended by Hammond, who claims to have obtained good results thereby. My own

**Medical Press and Circular*, December 29, 1869.

†In a discussion before the Société de Biologie, on October 27th last (since this paper was written), on the subject of metallo-therapie, M. Charcot stated that M. Burcq had obtained in his wards at the Salpetriere some encouraging results from the internal use of various metals. For example, in three persons suffering from hysterical hemi-anæsthesia, who were "sensitive" to gold, sensation re-appeared after the use of chloride of sodium and gold; although a relapse occurred when the medicine was suspended. In a hystero-epileptic, subjected to the same treatment, the hysteria was relieved, whilst the epilepsy remained unaffected. Another patient, suffering from hysterical hemi-anæsthesia, was cured by the administration of the preparations of copper, to which medicine she was "sensitive." He thought we were not yet in a position to make any positive statements with respect to relapses.

experience with it has been very limited, and not very favorable.* .

About eighteen months ago, a case of hysteric mutism was reported by Lionville and Debove,† which was cured by pressure on the left ovary, which was quite sensitive. In this case, the first effect of the pressure on the ovary was to cause convulsions, but as soon these passed off the patient spoke with ease. We shall refer to this again in connection with the treatment of the paroxysms.

Ice applied in bladders over the ovary has been used with success by Bourneville and Feréol §. The application was made two or three times a day for an hour or two each time.

Althaus‖ has reported a violent case of acute hysteria in a young man, aged twenty-three, which was promptly relieved by the hypodermic injection of morphia.

For the arrest of hysterical convulsions or other paroxysmal hysterical attacks, a great variety of means has been proposed. Assafœtida, valerian, and musk have long since become classical. More recently the bromides have held a conspicuous place. Bromide of potassium and camphor in combination frequently give excellent results; and when these have failed, the bromide of camphor when an attack is threatening will frequently ward it off. Chloroform and ether are only to be used when the convulsions are very severe, and when other means for their relief have failed. So many alarming and fatal accidents have been reported from the use of chloral that its use in hysteria would scarcely be justifiable under any circumstances. Alcoholic stimulants will nearly always give temporary relief; but in no class of cases is their use attended with more danger to the moral well-being of the patient, and hence the greatest caution should be exercised in their administration. Several instances have come to my notice in which ladies of culture and refinement have become addicted to liquor, who commenced its use under the advice

*Since writing the above, two of my cases treated by electricity have improved greatly, and apparently the improvement has been due to the galvanism, the other treatment having been faithfully tried before without benefit.

† *Le Progres Medical*, No. 9, 1876.

§ *Le Progres Medical*, 1876; pp. 205, 241.

‖ *Medical Times and Gazette*, April 9, 1870.

of a physician to relieve hysterical paroxysms. Charcot* speaks in the highest terms of pressure on the ovary for the relief of hysterical convulsions; and in the only two cases in which I have tried it, it has certainly appeared to answer all expectations.

Dr. Paul Fabre† relates the case of a man who suffered from hysterical convulsions which were controlled by pressure on the testicles; and he states that in the same patient they could also be controlled by compression of the carotids.

It is unnecessary to say anything as to the good effects of change of air and scene in obstinate cases of hysteria. Nor need I mention the necessity for using moral suasion in such cases. Physicians are too well agreed as to the propriety of such measures to make it necessary to say anything on this subject.

ART. III.—*Disease of the Sacro-Iliac Joint.* By HUNTER McGUIRE, M. D., Professor of Surgery, Medical College of Virginia, &c., Richmond, Va.

Mrs. R. P. R., æt. about 32, from Virginia, applied to me in November, 1876, laboring under sacro-iliac disease. I copy the following extract from a letter describing her case written to me by her husband:

"In December, 1875, my wife began to complain of her back, hip and leg, and began to suffer with pain in her head and sometimes in her stomach; these gradually grew worse each day. About the 15th of February she was compelled to take to her bed; at this time the pain in the lower extremity of her back and hip was excruciating, and appeared to be spasmodic, lasting some ten or fifteen minutes, and coming on very often. At this time the pain would shoot down the leg and across the lower extremity of the back, and at the extreme end of the backbone, The pain here appeared to be more severe and more obstinate, and it was described by her as being like a two-edged sword piercing her through. She had nervous chills and night-sweats nearly every night; her feet were always cold. Nothing but the insertion of morphine under the skin gave her relief. Her hip and back were blistered, with evident temporary relief. The blisters were frequently repeated. After nine weeks in bed she was able to get up, and gradually walked with the assistance of

* *Op. Cit.*, pp. 331, 332.

† *Annales Medico Psychologiques*, May, 1875.

the arm of some one, but she could neither laugh, cough nor sneeze without being thrown into violent pain at the lower extremity of the back. At this time a curvature appeared, and the hip enlarged; this increased daily. She suffered all the time—some days a little better, other days worse, especially in damp and cloudy weather. Blistering the hip was continued for weeks, from time to time. Sitting in the sun, or taking a sun bath, afforded relief. Riding in a vehicle, or making a false step in walking, produced intense pain. She was constipated, and had all of this time a good deal of difficulty in making water. In July, 1876, I took her to the Hot Springs, Va. She took the hot spout bath every day for fourteen days. At first they seemed to weaken her, but afterwards she gained in strength, and that she received much benefit from the thermal baths, there is no doubt. She walked better, had better use of her limb, her appetite improved, and she grew stronger. The night-sweats ceased, and she could lie on her back, which she was unable to do before. She still had the paroxysms of pain, but not so severe; and when they disappeared they would leave sore places or tender spots on the hip and back, and a general aching of those parts; the hip and back appeared to have no strength, and felt as if they would give way and break apart."

When I saw this lady for the first time I found her in bed, lying upon the unaffected side, which she said was the least painful position she could assume. She was a pale, strumous looking woman, with a face indicative of great and constant suffering. She turned upon her back, at my request, very slowly, and with evident pain and difficulty. I found the right limb atrophied and flabby. It was straight, neither inverted nor everted, but when both limbs were extended, the one upon the diseased side was apparently one inch and a quarter longer than the opposite one. By actual measurement I could detect no difference in the distance between the anterior superior spinous process of the ilium, and the internal malleolus on the two sides, showing that the increased length of the right limb was not due to any change in the hip, knee, or ankle-joints. The anterior superior spinous process of the right side was much more prominent and lower down than its fellow on the other side—the pelvis upon the right side being lower, and the innominate bone rotated downwards and forwards. This twist in the pelvis produced the apparent lengthening of the limb. There was no swelling about the hip-joint, and the natural hollow behind the trochanter was a little greater than upon the sound side, in consequence, doubtless, of some atrophy of the muscles; but marked swelling existed over the sacro-iliac articu-

lation, extending over the whole length of the joint. Tenderness upon pressure was felt over the whole of the sacrum and ilium, but when the fingers reached the sacro-iliac joint, and pressure was made, it produced intense pain. When the bones of the pelvis were fixed by the hands of an assistant, the limb on the diseased side could be moved in any direction and without pain. The movements of the hip joint were perfectly preserved, and it was easy to exclude the possibility of hip joint disease in the case. The thigh could be flexed or extended, or abducted or adducted without the least trouble. If any of these movements were attempted without first fixing the innominate bones, the pain was intolerable. Catching hold of the wings of the ilia, and moving them backwards and forwards, produced severe suffering, or pushing the bones together, or trying to separate them, caused pressure upon the diseased articulation, and pain. Extension of the limb gave a grateful sense of relief.

When she stood up out of bed she rested the whole of her weight on the sound limb, leaning the body over so that the foot on the affected side swung free from the floor. There was no flexion or rotatory derangement of the limb, and when she pushed it forward in attempting to walk she kept her body bent to the opposite side, and her hand pressed tightly upon the iliac bone to fix it and prevent motion in the sacro-iliac joint. The movement was peculiar, and entirely unlike that attending hip or spinal disease. She complained while standing, or endeavoring to walk, of the feeling her husband refers to of falling asunder. The more quiet she kept the less she suffered, although her pain was constant, of an aching, gnawing character, occasionally amounting to intense agony and requiring full doses of morphia to obtain sleep in any position.

I sent this lady back to her country home, as for many reasons it was better for her at that time not to stay in the city, and wrote to her family physician, an unusually careful and intelligent man, to put the lady in bed upon a firm, hard mattress, and to make extension of the limb of the diseased side by attaching a weight to the foot. This was to be done by the ordinary method of applying longitudinal strips of adhesive plaster to the limb, and confining them there by circular strips and a roller bandage; to the free end of these strips a stout cord is tied, which plays over a pulley fixed at the foot of the bed; the cord carries the extending weight, which in this case, I suggested, should not be more than three pounds at first, to be gradually increased to eight pounds. The weight of the body, and slight elevation of the foot of the bed, would make sufficient counter-extension. She was to have a plain, nutritious

diet, and no medicine, except some simple aperient when necessary.

In a letter, dated December 18th, from the husband of the lady, the extension having been kept up three or four weeks, I was informed that Mrs. R. was in every respect much better—that at the end of the third week she ceased to suffer any acute pain; that she still had some aching in the lower part of the back.

At the end of the sixth week, Dr. Jerry Farmer, her physician, wrote that she suffered very little pain of any kind, and there was scarcely a perceptible difference in the length of the two limbs. "She can cough, laugh, or sneeze without any pain, though when she sneezes she complains of the jar it produces at the lower end of the back." I was also informed at this time that her appetite was not so good, and that the knee-joint of the affected side was sore and painful. I suggested, in answer to this letter, that she should take two grains of quinine and some good whiskey before each meal, and that the adhesive strips should be extended above the knee, so that the ligaments of this joint might be relieved of the strain produced by the weight.

January 19, 1877. The doctor wrote to me: "Mrs. R. has been under treatment for two months. There is now no conceivable distortion in any way; both limbs are exactly the same length; no intumescence of the soft parts that I can discern general health excellent, much better than when she went to bed, but there is still some tenderness on pressure over the sacro-iliac joint.

I requested the doctor to keep the extension up for two weeks longer; then to remove it, and let her stay in bed for two weeks without the weight; after this to get up out of bed and gradually go about. Five months after this (July, 1877), I saw this lady as she passed through the city. She was free from all pain in the joint, and could walk a mile without trouble. There was no lameness, and the cure seemed to be complete.

Case II. Miss A. P., æt. 22, came to me in November, 1876, with sacro-iliac disease. Eighteen months before, while crossing a railroad track, she caught her foot in the iron rail, and fell to the ground, violently twisting her body. She walked with some difficulty to a house about five hundred yards off, and by the next night she had sufficiently recovered from the effects of the fall to attend a party given in the house, and to dance for an hour or two. The next day she began to suffer pain in the hip, and to walk lame. The pain and lameness, gradually increasing, have continued without intermission to this date. Thinking her

disease was rheumatism, her physicians have given her mercury, iodide of potassium, iron, colchicum, etc., at different times, but without even temporary benefit. Her suffering has gradually been increasing until now her condition is most deplorable. For the last six weeks she had been unable to lie down; for lying down, even on the unaffected side, adds so much to the pain she is unable to endure it; she sits in a chair resting upon the left buttocks, half lying with the side of her body against the back of the chair, and pressing constantly with her hand the right iliac bone. The pain is aggravated by any movement of the body. She sleeps in the chair, sometimes for half an hour, and is aroused by some sudden movement of the muscles about the hip, which causes her to cry out in intense agony. I found the right limb apparently one and one half inches longer than the left, and the changes in the position of the pelvis and hip-joint as described in the last case. The movements of the hip-joint were perfectly free and unrestrained when the pelvis was fixed; no pain in the knee. The general symptoms were all very similar to those described in the last case. An attempt to stand up gave the poor girl so much additional pain that I did not insist upon her doing so. The swelling over the sacro-iliac articulation was much greater in this case than in that of Mrs. R. The skin in that region was slightly reddened, and I thought I could detect signs of fluctuation over the joint. This, with the fact that the pain in that region had lately been throbbing and pulsatile, made me fear that matter had already formed there.

Nov 5. Miss P. was placed in bed, and the extension applied to the limb. As it was impossible for her to lie down upon her back, she was propped up in bed with pillows, etc., into nearly a sitting posture, and rested partly upon her left side. An eight pound weight was used from the beginning of the treatment. The first night she suffered less pain in the parts than she had done for months; and at the end of a week she could lie down upon her back, using only two pillows for her head and shoulders. In two weeks, the acute suffering had disappeared, and she could sleep without an anodyne. Her appetite began to return, and her face to lose the expression of pain and weariness. In six weeks, the limbs were nearly of the same length, and at the end of the tenth week, I took away the extension, and permitted her to get up. The limbs were at this time the same length, but the swelling had not gone, and the parts were tender on pressure. I doubted the propriety of letting her get up, but there were some domestic circumstances which made it necessary, if it was possible.

For two weeks after getting out of bed, she seemed to improve, the swelling and tenderness to diminish, and she walked about the room, although very lamely; but after two or three weeks had passed, she gradually grew worse, and all of the old symptoms of pain threatened to return. She was then induced to come to the "Retreat for the Sick," and on the 20th of March she was again put in bed and the extension applied. In ten days she was entirely free from pain; had a good appetite, slept well, and was one of the most cheerful patients in the Hospital. Her relief from pain was so complete that she said she was willing to submit to the treatment for that purpose alone, even if there was no prospect of cure. In eight weeks the symptoms had entirely disappeared. All tenderness had ceased, and the swelling was gone. The limb was wasted and flabby, but she could move it in any direction without pain, and cough or sneeze without feeling the jar about the sacro-iliac region.

She was sent home, with directions to stay in bed or upon a lounge for another month, and then gradually to use her limb by walking. On her way home, she took cold and had a pneumonia, which confined her to her bed for six weeks. After this time, she began to walk. She called to see me in October last, as she was passing through the city. She is free from all pain and suffering, and walks with a lameness so slight as hardly to be noticed. This is due to want of muscular power, and will, in time, entirely disappear.

I am induced to record the foregoing cases, not because I have any new principles of treatment to offer, but because so little satisfactory information in regard to this disease can be obtained in general or special works on surgery, and because the prognosis usually given by all writers upon this subject is a very gloomy one.

Professor Gross says: "The prognosis is always unfavorable; now and then, it is true a case recovers, but such an occurrence is very uncommon."

Holmes (*System of Surgery*), who gives little more than a page of his great work to this subject, says: "The prognosis in these cases is always unfavorable, but becomes specially so when matter has once begun to form."

Ashhurst says: "The prognosis of sacro-iliac disease is always unfavorable."

Erichsen, who has devoted special attention to the subject, and in his book on *The Science and Art of Surgery*, has given a

longer and better account of the disease than I have been able to find anywhere else, says: "The prognosis of this disease is always most unfavorable. * * * * I have never seen a case recover after the full development of the disease, and after suppuration had set in."

The very unfavorable prognosis given by these authors, and by many others that I might mention, refer to the whole progress of the disease, but especially after it has advanced to suppuration; and this end is almost inevitable, according to their statements, after the usual treatment recommended, viz: fixing the joint by gutta-percha or leather splints, counter-irritation with the hot iron, etc., and the administration of cod liver oil, iron, iodide of potassium, etc.

By the plan of treatment adopted in the cases reported, the principles of treatment which guide us in the management of all cases of joint disease is simply and completely carried out. We obtain by it rest, extension and counter-extension. Without these agencies, constitutional remedies are almost worthless, and with them frequently unnecessary. The progress of the disease is generally very slow; months and sometimes years elapse before the bone dies and pus is formed, and as the diagnosis is not usually difficult, we have abundant time for using the rest and extension.

Dr. Sayre, in his late excellent work on *Orthopœdic Surgery and Diseases of the Joints*, says that extension "can be very easily accomplished by making the sole of the shoe worn upon the well foot of sufficient thickness to permit the affected limb to swing free, so that its own weight may become an extending force. If the weight of the limb is not sufficient to make the amount of extension required, lead can be run into the sole of the shoe, and thus the weight can be increased as circumstances may require. Now give the patient a pair of crutches, so that the weight of the body shall be received by the axillæ and not by the pelvis, and all the indications in treatment have been met."

Rest and extension, to be of any value, must be continuous and uninterrupted, as Dr. Sayre himself has repeatedly taught; and unless the patient remains for weeks erect upon his crutches, neither sitting nor lying down, it cannot be obtained in this way.

ART. IV.—*A Case of Primary Sarcoma of the Iris—Extirpation of the Eyeball—Death One Year after the Operation, from Recurrence of the Disease—Remarks.** By FRANCIS D. CUNNINGHAM, M. D., Ex-President Medical Society of Virginia; Professor of Anatomy in the Medical College of Virginia, etc., Richmond.

June 23, 1876.—I was consulted by J. A. W., white, farmer, from Fluvanna county, Va., who gave the following history of himself. He has always been rather delicate, and at times subject to dyspepsia in various forms, but never had any constitutional disease. Four months since, he suffered with what were supposed to have been neuralgic pains affecting the left side of the chest and left shoulder. These pains were severe and intermittent in character, and after they had continued for about a month, the left eye became painful and inflamed. In a few days the eye trouble was apparently relieved, but only to remain so for a short time, as the pain and inflammation returned, to continue without intermission up to the present time. Poultices and various washes had been used, but with no effect, as the only relief he had experienced was when under the influence of opiates, which he has been compelled to take regularly, in order to go about at all. In four or five days from the beginning of the last attack, all useful vision in that eye was lost and the other eye also has been extremely sensitive to light. With the severe pain, there appeared a speck or deposit on the iris of the left eye, which has steadily increased in size.

The present condition of the patient indicates great prostration and emaciation from long suffering, and his nervous system is much impaired by the prolonged and constant use of opiates.

Vision of the best eye = No. 6 Jaeger at normal distance, although there is very great photophobia. With the left eye, he cannot count fingers, and can only discern large objects in motion. Tension of this eye + 2, and motions of the globe normal. The left lids are swollen, and the conjunctiva is congested, especially on the outer side and in the vicinity of a tumor or growth which covers the upper and outer quadrants of the iris. The growth is of a brownish, yellow color, about the size of an average size split pea, covers the entire breadth of the iris, and encroaches beyond the pupillary margin into the contracted pupil. The anterior surface of the tumor is in contact partly with

*This rare case was verbally reported by Dr. Cunningham during the session of the Medical Society of Virginia, 1877, and has been written up in detail at the solicitation of the Editor for the pages of the *Monthly*.

the posterior surface of the cornea for about half its width, and is uneven or slightly nodulated. The color, location and general appearance of this deposit in the iris was so different from any that we had ever seen as the results of the inflammatory process, that our suspicions were at once aroused as to its probable malignant nature, and our inquiries developed the fact that at least two of the relations of the patient on the paternal side had been reported as having died of some form of cancer; but beyond this, nothing definite could be learned. Having decided that the growth was malignant in its nature, and of the character of a sarcoma, it was feared, from the great loss of vision in the eye, that the disease was not limited to the amount visible on inspection, and the only chance for relief was to be found in the removal of the entire globe. The patient having recovered somewhat from the fatigue of the journey to the city, was informed as to the supposed nature of his disease, and cheerfully consented to the removal of the eye on the promise of the relief from pain that would result from the operation.

On the 26th of June, I enucleated the globe in the presence of Drs. Brock, White and Tompkins of this city. There was very little hæmorrhage and a single suture was placed in the conjunctival wound. The patient took his anodyne that night for the last time whilst under my observation. The suture was removed on the third day, and on the fifth day the wound looked so nearly healed that he was allowed to return home by the canal packet boat.

A dissection was made of the removed globe, with the following results:

All of the tissues of the globe showed manifest increased vascularity, but, to the naked eye, none except the iris, to which the tumor was attached, and a small part of the cornea in contact with the outer part of the tumor, had undergone any alteration of structure. This part of the cornea appeared to be softened and easily ruptured in the manipulation incident to the operation and dissection. The tumor in the anterior chamber was intimately connected with the anterior surface of the iris to which it was firmly attached by its entire breadth on one side, whilst the other was uneven and free. It appeared to be attached to the *iris alone*, and if there were any adhesions with the anterior surface of the lens, they were too slight to be detected in our examination.

In structure, the tumor appeared to have a delicate membranous investment, enclosing a semi-solid yellowish material, which was located in numerous compartments, made by involution of the investing membrane. At various points in the mass, there

were small extravasations of blood. Such was the appearance of the tumor to the unaided sight, and we regret very much that it was not in our power to submit any portion of it to a microscopist of experience in such matters.

The patient returned home, and his health rapidly improved after the operation, so that he gained in flesh and strength, and was able to attend to his duties, hunt, &c., as before.

The wound in the orbit healed entirely and gave no trouble from the discharge or from pain. By a letter from the physician who attended him in his last illness, which terminated June 12th, 1877, I learn that he was as well as usual up to about two weeks before his death, when he was taken with symptoms of head trouble, became speedily delirious and violent, which symptoms were succeeded by profound stupor, from which he never aroused. Associated with the above symptoms, there was paralysis of the *right* arm with loss of voice. Up to his last illness he never complained of any pain in the orbit, nor was there any protrusion of the lids to suggest a recurrence of the tumor in the orbit. Such is the statement of one of his attendants, although another one states, that "whilst washing his face a week or two prior to his last attack, the stump of the eye removed dropped out, though he never, either prior to, or subsequent to the time, suffered pain in that region." No *post mortem* was made, and the conflicting statements of the medical attendants are calculated to produce some confusion; but from a careful analysis of the history of the last illness of the patient as given by his two attendants, we are led to conclude that his death was caused by a return of the disease at the back part of the orbit and base of the brain on that side.

One of the attendants on his last illness expressed the opinion that there was disease of the mesenteric glands, and states also that the great grandfather and one of the great uncles of the patient had cancer, of which the former died.

Remarks.—At the time this case first presented itself, we were satisfied that the extreme rarity of the disease would render it worthy of record, but we did not then anticipate that the history of our patient would be so soon completed and in the manner that it was. In the first No. of Volume V of the *Archives of Ophthalmology and Otology*, published 1876, by Professor H. Knapp, in New York, and S. Mors, in Heidelburg, there is the report of a case of primary sarcoma of the iris, cured by excision of the tumor. The operation was performed and the case reported by Dr. Charles J. Kipp, of Newark, N. J. The patient

was seen eighteen months after the operation, and the eye was entirely free from disease. From the thirteenth day after the operation the sight of that eye was as perfect ($\frac{20}{20}$ S.) as that of the other. In this article, Dr. Kipp refers to the case, already on record, of which he gives a brief outline of three, and alludes to two others. In the three cases given somewhat in detail, the globe was removed and the patients were seen, in one case, five months; in another, two years after the operation, and there was no evidence of any return of the disease. In the third case no subsequent history of the patient was given in the report. No history or description of two of the cases was given further than that the tumors were removed by a procedure analagous to an iridectomy, and that there was no sign of a relapse when seen five or six weeks after the operation. In Dr. Kipp's case, the tumor in the iris began twelve years before it was seen by him. He states, however, that the growth increased in size more in the last month than in the preceding twelve years. In the other cases the duration of the tumor prior to the operation is given as one year, eight months, and two years and a half respectively; and in our own case it could not have existed more than three months.

In Dr. Kipp's case, and the one in which the tumor had existed for a year, there was no impairment of vision. In one of the others, that in which the disease had existed for eight months, the patient could only distinguish bright light from darkness, and in the case where the tumor had existed for two and a half years, the sight is simply said to have been impaired, without stating the degree of impairment. From the description of the five cases (including our own), of which we have the details, it would appear that the size of the tumor was very nearly the same in all of them. In three cases it was situated in the lower half of the iris, and in two in the upper half. It is interesting to note the effect on vision in these several cases, and the duration of the disease prior to the occurrence of such damage as to cause the patients to apply for relief.

At the time we operated on our patient, we had not seen the report of Dr. Kipp's case; for if we had, we should have, as a first operation, been contented with the removal of the tumor and corresponding portion of the iris, as performed by him. As

it was, the authorities and reports at our command only advised the operation of enucleation on general principles, and we really did not know of any of the cases reported in Dr. Kipp's paper, to which we are indebted for the few statistics on the subject given above, and which we have taken the liberty of inserting in this paper for the benefit of those who may not have had an opportunity of reading the article as published by Dr. Kipp in *Archives of Ophthalmology and Otology.*

Original Translations.

Translations from the French and German. By WILLIAM C. DABNEY, M. D., Charlottesville, Va.

Clinical Researches on the Motor Centres of the Limbs. (*La Province Médicale*, Oct. 31st, 1877). Some months ago we translated an article by M. Lucas-Championniére, on the "Use of the Trephine in Certain Cases of Paralysis, Limited to Certain Parts of the Body." The paper, of which the following is an abstract, was read by M. Bourdon, before the Academie de Médicine, on the 22d of October last; and he arrives at the following conclusions:

The motor centre of the arm in man occupies a layer of the central cortex comprising the two ascending convolutions—frontal and parietal—and also the neighboring parts, and *not* a limited and circumscribed region of this zone as experiments on animals would seem to indicate.

But few observations were made relative to the situation of the centre for the lower limbs; but so far as could be determined from the cases of paralysis and atrophy [from amputation] which were reported, the upper part of the ascending convolutions was the centre for movements of the lower limbs.

The centre for the face, according to M. Bourdon's observations, is located at the posterior extremity of the second frontal convolution, and the adjacent part of the ascending frontal.

M. Bourdon states that atrophy of the corresponding centres is caused by amputation, or arrest of development of a limb.

The practical conclusions from these facts are, says M. Bourdon, that a paralysis limited to the *arm* does not furnish any accurate indication as to the point at which the trephine should be applied. If it be applied at the centre of the Rolandic line, as M. Lucas-Championniére advises, the surgeon runs the risk of

going either above or below the affected point, which may indeed be situated at a considerable distance from the opening in the cranium.

If, however, an aphasia co-exists with the brachial monoplegia, or if a facial palsy is associated with it, the indications are much more precise.

M. Lucas-Championnière's directions to apply the trephine at the upper limit of the Rolandic line, when the paralysis is limited to the lower limbs, seems to be sound, in view of M. Bourdon's clinical studies But in three out of four cases, the lesion was situated in front of, and not behind, this line.

M. Gosselin remarked that it was only proper, in his opinion, to apply the trephine when there was fracture and depression of the cranial vault, and he called the attention of the Academy to a case reported by M. Cavadec, of Brest, in which a young woman had a brachial monoplegia, due to depression of the parietal bone, which recovered quite promptly without any operative interference.

M. Bourdon replied that he did not hesitate to trepan when the symptoms pointed to a localized lesion, and introduced Broca's case, in which this distinguished surgeon, guided solely by the existence of an aphasia, opened an intra-cranial abscess with the trephine.

M. Gosselin stated that if this operation was performed, the carbolated dressing was not a preventive of the consecutive cerebral meningitis, and that he considered the alcoholic dressing decidedly preferable.

[It will be remembered that M. Gosselin urged the use of alcohol as a dressing for wounds some years ago.—W. C. D.]

Treatment of Insomnia by Electricity.—M. Vigouroux, in an article headed "Notes on Electro-Therapeutics," in *Journ. des Connais. Médic.*, No. 5, 1877, speaks in high terms of the use of electricity for insomnia. He thinks the general sedative action of the galvanic current is sufficiently well known; but that its hypnotic effect, which he considers just as marked, is completely overlooked.

The mode of applying it is very simple. Large, flat electrodes (carbon covered with chamois skin) being placed on the temples, a current from three or four or five Trouvé elements is allowed to pass for half a minute or a minute. The poles, he states, may be applied at other points of the cranium, when the current is passed, but through the temple, it is the most efficacious. When the usual precautions are observed, no subjective phenomena (retinal or other) are observed.

If the application is made in the morning, the patient feels a

greater or less tendency to sleep during all the remainder of the day, and the night is passed in refreshing sleep. The hypnotic effect may still be felt the second and even the third day after galvanization.

M. Vigouroux states that he has observed this action of the galvanic current more than fifty times, most of the patients being under the care of M. Charcot. The insomnia was due to various causes, and in some cases it had proved rebellious to all hypnotics. In one case, six grammes (90 grains) of chloral a day had been given without effect. Electricity failed only in certain exceptional cases, when, for instance, the insomnia was caused by intense dyspnœa.

In conclusion, M. Vigouroux states that he considers electricity employed in this manner equal to any of the known hypnotics in a medium dose, and it possesses the great advantage over them of being free from danger, and in causing no digestive trouble.

[This mode of treatment for insomnia has frequently been employed in this country, and doubtless every physician who has had much experience with the constant current, has observed how often drowsiness is caused by it. In one patient, who was himself a physician, I observed the same effect produced by the interrupted current. In this case, the method of central faradization was employed, and the patient would frequently drop to sleep during the application.—W. C. D.]

The Treatment of Portions of Fingers which have been Accidentally Cut off, with Remarks on Carbol-Collodion.—Dr. Karl Franz (*Memorabilien*, 8 Heft, 1877), reports a case in which a man had the end of his finger bitten almost off by a horse. The bite was through the joint between the second and third phalanges of the index finger, and the end was only held on by a narrow strip of epidermis. The subcutaneous connective tissue was cut even, and the wound bled freely. It was first washed with cold water, and then with a solution of carbolic acid. The last phalanx was then put in proper position, and the edges brushed over with a ten per cent. solution of carbolic acid in collodion. On the fourth day, the joint was well healed, and the circulation re-established; there was no sensibility, however. On the twenty-first day, the patient could move the finger and there was no pain even on strong pressure.

In wounds and cuts, and also in cases of burns and of erysipelas, where the surface involved is not very great, the writer recommends the solution of carbolic acid above mentioned. The surface to which the application is to be made should be cleansed as thoroughly as possible, and then the solution brushed over it; when the ether has evaporated, a layer of wadding should be ap-

plied. It is seldom necessary to brush it over more than once. This dressing should be allowed to remain four, or, in cases of burning, eight days, and the results will generally be satisfactory.

Franz reports, also, a case of badly crushed finger, and also one of an extensive burn in which the treatment was followed by rapid improvement.

The Treatment of False Joints.—Dr. Becker (*Aerztl. Intelligenzblatt*, No. 41, 1876, and *Rundschau*, October, 1877), reports a case of fracture of the tibia in the lower part of the leg attended by dislocation of the broken pieces of bone, which was followed by a false joint. His treatment consisted in first placing the limb in a plaster bandage, in which he cut a large window in order to get access to the tibia at the broken part. He then inserted the needle of a Pravaz syringe at the under surface of the false joint, and injected a three per cent. solution of carbolic acid. Four such injections were made at the first sitting. Four days afterwards, two injections were made with a four per cent. solution (of carbolic acid), which were followed by some inflammatory œdema. Two days after this, a five per cent. solution, and three days later still, a six per cent. solution was injected at two points. The reaction was slight. After four weeks, there was a very abundant formation of callus, and complete consolidation ensued. Dr. Becker recommends that this method be tried in those cases where other measures have proved unavailing.

A Case of Varicose Aneurism within the Cranial Cavity with Prominence of both Bulbs, and Total Blindness.—Ligature of the Left Common Carotid.—Recovery.—Dr. E. Grüning (*Arch. für Augen und Ohrenheilkunde*, Band. V, pg. 280), reports the following singular case: A person fifty-nine years old fell down the steps, striking the head, and remained unconscious for some hours. By degrees, exophthalmos was developed on both sides, and at the same time there supervened a severe supra-orbital neuralgia, and the patient heard constantly a loud noise in the head. Two weeks after the accident, Dr. Grüning found, besides the symptoms which we have just mentioned, a left-sided paralysis of the abducens, and a moderate degree of deafness. In auscultation of the head, a sound was heard which disappeared when the left common carotid was compressed. Pressure on either eye caused a feeling of giddiness. No tumor could be detected. Twelve weeks after the accident, the patient was totally blind, and the eye-balls were immovable. The exophthalmos and noise had increased. Dr. Grüning then ligated the left common carotid, and immediately afterwards the patient could count the fingers at fifteen feet. The subjective sounds had almost entirely disappeared. After five days, the exoph-

thalmos had almost disappeared, the eyes and lids were freely movable, and sight and hearing had returned.

Dr. Grüning thought that the fall which the patient had, had produced a fracture of the base of the skull, which established a communication between the cavernous sinus and the left internal carotid artery.

Co-existence of Cancer, Tubercle and Emphysema.—An interesting case in which all three of these affections existed in the same subject, was reported by Moutard-Martin to the Société Anatomique a short time since (*Le Progrés Medical*, Nov. 3d, 1877). The subject was a woman, seventy-one years of age. At the autopsy, there was found a cancer of the greater curvature of the stomach; there were tubercles extending over a large surface in the apex of each lung, and a very marked emphysema. There also existed a cirrhosis with fatty degeneration of the liver; and in addition, the neck of the uterus was greatly elongated, measuring seven centimetres. M. Moutard-Martin remarked that the co-existence of *two* diatheses—the cancerous and tuberculous, for example—was far from being as rare as is generally supposed. He had himself encountered four cases of this kind. In the present instance, it is interesting to notice the co existence of emphysema with tuberculosis, and it suggests caution, lest the symptoms in such a case should all be considered due to the one or the other of the two diseases. Tuberculosis and emphysema often co-exist, and it is often difficult to say what symptoms belong to one, and what to the other.

Partial Resection of the Elbow Joint.—A very interesting discussion took place some time since at the meeting of the German Society of Surgery on the relative merits of total and partial resection of the elbow joint, and also of the hip joint. We take the following abstract from the *Gazette Médicale de Strasbourg*, for October last.

The discussion was opened by Hueter, of Greifswald. The conclusions of the author on this important question were drawn from five operations which he had recently performed; three of which were partial, and were necessitated by injuries; and the other two were total, performed for caries. In the latter, it was impossible to save the olecranon in consequence of its participation in the carious disease.

The retention of pus was the principal reason, he thought, why partial resection had not given satisfaction heretofore; but he thought the severe judgment hitherto pronounced against it should be modified, now that we can utilize the antiseptic dressings.

The publications of Saltzmann, Meyer and Oster speak in

favor of total resection. Dominick, writing in 1876, reports 266 cases of total resection, with a mortality of 25 per cent.; and 111 partial resections, with a mortality of 20.7 per cent. In operations necessitated by injuries, partial resection was to be preferred. Contrary to the opinion of Dominick, who attaches great importance to the preservation of the humerus in view of the functional results, Hueter deems it much more desirable to preserve the olecranon.

Gürlt stated that he believed the mortality was virtually the same in complete and partial resections—23.3 per cent. for total, and 23.5 per cent. for partial resections.

Langenbeck stated it as his opinion that, in operations for traumatic troubles, one could not be too conservative; while it was "a fault" to be very conservative when the operation was necessitated by disease. He thought this statement held good for all the joints except the hip, where the removal of the great trochanter favored the discharge of pus.

Volkmann always removes the great trochanter; the functional results, such as abduction and flexion, are better where this is done. The osseous reproduction is also more regular and thus contributes to the ultimate success. At the ankle joint, he practises partial resection with preservation of the astragalus in traumatism or acute affections. He never employs drainage from one side to the other, but contents himself with inserting little drainage tubes in the angles of the wounds.

Lucke confines himself to the removal of the head of the femur in young subjects, and only cuts out those parts of the trochanter which are actually diseased. In a case of coxalgia, complicated by osteo-myelitis of the ischium, he had cut out this latter projection and the head of the femur only, and the result, as far as the functions of the limbs were concerned, was excellent.

Book Notices, &c.

Physical Survey of Virginia:—Her Resources, Climate and Productions. Preliminary Report, No. II. By M. F. Maury, LL.D., Etc., Late Professor of Physics in Virginia Military Institute. With Notes and Additions by his Son. N. V. Randolph, Richmond, 1877. Pamphlet, pp. 142.

This book is published by direction of the State Board of Immigration, and is copyrighted by the Commonwealth of Virginia. It is distributed by the State Board to those who are in search

of homes. It contains a statement as to soil, natural growth, productions, population, habits of people, a description of the climate, healthfulness, mortality, etc., etc., of each county in the State. In addition, it has an excellent colored county map of the State. The value and interest of the work will appear at once from this mention of its contents. Orders for the book should be sent (with fifty cents) to the publisher, Mr. N. V. Randolph (of the firm of J. W. Randolph & English).

Modern Medical Therapeutics: A Compendium of Recent Formulæ and Specific Therapeutic Directions. From the Practice of Eminent Contemporary Physicians, American and Foreign By GEORGE H. NAPHEYS, A. M., M. D., etc. Fifth Edition, Enlarged and Revised. Philadelphia: D. G. Brinton, 1878. Price, cloth, $4.00. Pp. 598. (For sale by Messrs. West, Johnston & Co., Richmond.)

Modern Surgical Therapeutics: A Compendium of Current Formulæ, Approved Dressings and Specific Methods for the Treatment of Surgical Diseases and Injuries. By GEORGE H. NAPHEWS, A. M., M. D., etc. Revised to the Most Recent Date. Philadelphia: D. G. Brinton, 1878. Price, cloth, $4. Pp. 578. (For sale by Messrs. West, Johnston & Co., Richmond.)

The profession is under lasting obligations to the Editor, Dr. D. G. Brinton, for the careful labor he has bestowed in the revision of the fourth edition of this work, which has resulted in the enlargement of the single volume, issued about a year ago, into the two magnificent volumes named above, which must prove of the utmost practical utility to every physician and surgeon who may own the books. With a rare estimate of the useful, the Editor has compiled from home and foreign journals and from private sources the best prescriptions of the most eminent authors and clinical observers. We cannot too highly commend the works before us, especially to the "busy" practitioner who claims to have no time to consult exhaustive treatises, and to those practitioners who are anxious to procure in a nutshell the latest practical information as to the treatment of disease, and also to those whose means will not permit them the purchase of many books at a time. The titles of the works show their scope. The books themselves are all, and even more than the Editor claims for them. The paper and typography, too, as compared with the former edition, are very much improved.

In regard to the second of the above-named volumes, we find in its preface a sentence which more concisely explains its origin

and its scope than any we can frame: "The work grew out of the author's '*Modern Therapeutics*,' and is *an amplification of the Surgical portion of that work*. It is, therefore, in some sense, a companion volume to Naphey's '*Modern Medical Therapeutics*.'" We noted in our January No., 1877, the characteristics of that volume.

We would fail of our duty were we to omit the mention of the names of the most prominent of those in the profession to whom Dr. Brinton acknowledges himself to be under obligations for aiding him, as Editor, in revising the work. These gentlemen are Drs. C. C. Vanderbeck and Lawrence Turnbull, of Philadelphia; F. Peyre Porcher, of Charleston, S. C.; J. B. Mattison, and T. D. Crothers, of Hartford, Conn.

Materia Medica, for the Use of Students. By JOHN B. BIDDLE, M. D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College, etc. Eighth Edition, Revised and Enlarged, with Numerous Illustrations. Philadelphia: Lindsay & Blakiston, 1878. Pp. 462. Price, $4. (For sale by Messrs. Ellyson & Yancey, Richmond.)

This eighth edition has been demanded by the exhaustion of the seventh in less than one year. In looking into the merits of the book for an explanation of this popularity, we find that it is the outline of the course of lectures by Prof. B., and hence the book is in demand by the students. The Materia Medica descriptions are too brief, but the principles of therapeutics are well laid down. Yet the practitioner of medicine will not be satisfied with it. It is not full enough as to details. For instance, the vast and growing subject of electricity receives scarcely two pages of attention—not as much, indeed, as is given in the circular advertisements of manufacturers of electrical batteries. This subject of electrology has finally become established upon a permanent basis, and it is already becoming a recognized specialty in medicine; hence it should not be so slighted. Again, we find that the medicinal uses of opium claims just one page. Other agents are treated of in proportionate length.

Besides these defects, so far as they interest the professional reader, we find some errors. For instance, on page 100, we find it stated that the inhalation of ether was first resorted to in this country in 1846; and again, on page 107, that Mr. Horace Wells produced anæsthesia in the first instance by nitrous oxide gas; whereas Dr. J. Marion Sims, in the May number, 1877, of the *Medical Monthly*, proves incontestably that Dr. C. W. Long, of Athens, Ga., used ether by inhalation for anæsthetic purposes

in 1842. This is important as a historic fact, and should be noted in the ninth edition. Another error, since it has been established that what is known as "Nélaton's method" is far preferable, consists in the recommendation that, at the slightest approach of symptoms indicative of syncope during chloroform administration, "the patient should be placed in a recumbent position." The author should have urged, with all the force which his position as Professor gives him, that the patient's body should be inverted, so as to let the head hang towards the floor while the feet are swung over the shoulders of the operator.

Throughout the book we find but little that is of value to the medico-legal student.

The "Appendix" contains the signs and abbreviations used in prescriptions, and also a table of poisons and their antidotes.

A Guide to Therapeutics and Materia Medica. By ROBERT FARQUHARSON, M. D., Edin., F. R. C. P., Lond., Lecturer on Materia Medica at St. Mary's Hospital Medical School, etc. Enlarged and Adapted to the U. S. Pharmacopœia, By Frank Woodbury, M. D., Member of the Academy of Natural Sciences, Phila., etc. Philadelphia: Henry C. Lea. 1877. Pp. 410—12 mo. (For sale by Messrs. West, Johnston & Co, Richmond.)

This work is devised on a different plan from any other that we have seen. In short, it is a systematic hand-book, unencumbered by any botanical or pharmaceutical detail, giving in alphabetical order the names of the drugs and their doses, and in parallel columns, their physiological effects and therapeutical uses. The book does not attempt to discuss theoretical statements, but simply to give the well established results of experiments and obsevation. It is not exactly the work for the general practitioner, if he does not propose having more than one or two works in his library on Materia Medica and Therapeutics. But it is an excellent book for the college student, for the college professor or tutor or for him who is studying the physiological action of medicines.

We are glad to note that the author makes quotations from American authorities. Indeed, in his preface, he makes acknowledgements to Drs. Wood, Stillé, Bartholow, etc., of this country, and adds that "For many of my prescriptions, I am more especially indebted to Bartholow."

Dr. Woodbury, in editing the American edition, was compelled to make very copious notes and additions,—sufficient to warrant the insertion of the words "Materia Medica" on the title page—

"embodying the latest revisions of the U. S. Pharmacopœia, together with the antidotes to the more prominent poisons, and such of the newer remedial agents as seemed necessary."

A feature in this manual which recommends it to the "busy practitioner" is the naming of remedies for special diseases in the Index of Diseases. Such a list is often suggestive of a valuable line of treatment.

Many of the "new remedies" are mentioned; but principally by the American editor. There are some of the "new remedies," however, which deserve mention, to which no allusion is made. Among these is damiana, which has been introduced long enough to attract general professional attention, has been abused enough by those who have given it insufficient or unsatisfactory trials, but which has not been extolled enough by those who have prescribed it with "invariable success," as they affirm —possibly from the inclination common to many to shrink from becoming prominent in connection with the authorship of an article on this class of remedies.

In regard to ether, we find very good suggestions why chloroform may remain the "commonly-used anæsthetic;" but the American editor, in keeping with a prejudice on this subject that is general in his section of country, remarks that these views of Dr. Farquharson "must be considered as the criticism of an English author." We can easily produce from Southern practice a record of a hundred thousand consecutive anæsthetic administrations of chloroform without accident. Why at the North the ratio of fatality from chloroform administrations should be persistently stated at one in every 2,500 or 3,000 cases, we cannot conceive. Why some should be so constantly abusing a remedy, that, when properly administered in a thoroughly ventilated room and while the patient is in the head-and-body-level position, we cannot imagine. Then, too, since Nélaton's experiments and observations were announced, we have a surer method of restoring a patient who seems dead from chloroform than when the same effect is produced by ether. Strange it is, too, that the after-effects of ether, such as inflammation of the lungs and their appendages, have not been taken into consideration by those who have written so vehemently against chloroform. The writer of this notice, since he left the hospitals of New York City in 1868, confesses that he has never used ether, nor seen it used but once, nor known it to be used in the practice of his professional acquaintances in *several* of the cities of Virginia as the anæsthetic; but these ten years of experience and observation and heresay-evidence has never, in a single instance, suggested that chloroform was more dangerous than ether which lat-

ter he was accustomed to use and see used in the clinics and hospitals of New York. The Confederate Army experience of such men as McGuire, Chisolm, Wellford, and a whole host of others, added to their subsequent vast experience in the matter, should be taken into any estimate which attempts to fix the relative percentage of fatality from the use of chloroform and of ether.

A number of books, pamphlets, etc., have been received, which will be noticed in our February issue, as we cannot spare more space now to this department.

Editorial.

The Engraving and Biographical Sketch of Dr. Lewis A. Sayre, of New York city, which we present to our patrons in this issue of the *Medical Monthly*, are accurate in the delineations of his face, and in the brief portraiture of his life. Mr. Henri L. Stuart, who prepared the sketch, being necessarily restricted as to space, was compelled to compress into the compass of a few pages what might very easily have been expanded into volumes. But few living men are filling as large a space in the public eye, at this time, as Dr Sayre. As a surgeon, he has a world-wide reputation. By the boldness of his adventures, the brilliant successes of his operations, and his many original contributions to science and medical literature, he has distinguished himself above the ordinary level of great men. But although he is regarded alike at home and abroad with unbounded admiration—alas, for greatness—he has not passed beyond the realm of persecuting envy and jealousy.

The Transactions of the Medical Society of Virginia for 1877, published with this issue of the *Medical Monthly*, forming in themselves a distinct volume of 192 large octavo, closely printed pages, will be found of unusual interest. We do not venture too much, we think, in saying that these *Transactions* will compare favorably with those of any State Society in the Union. The Reports on Advances in several of the branches of medical science are first rate. The Special Reports by Drs. Wellford and Page make developments of great practical importance to medical men. Dr. James' paper in a very conclusive and forcible manner impresses a fact which has heretofore been too much over-

looked. Dr. Selden presents usefully instructive reports of cases of fracture of the femur within the capsule. Dr. Chancellor's experience confirms the value now generally ascribed to Iodoform. The discussion on the subject of Instrumental Labor will also be found of interest to the general practitioner outside of Virginia. As to the President's Address, by Dr. James L. Cabell, that will be read everywhere, both because of the deserved eminence of the author, as also because it contains valuable suggestions of a general character applicable as well in other States as in Virginia. Dr. Randolph's Address should excite more general interest in "the study of medicine" At the special request of the editor, the valuable paper by Dr. Dabney, on Hysteria, and the report of a case of Primary Sarcoma of the Iris, by Dr. Cunningham, have been awarded to the pages of the *Monthly*, and will be found under the head of Original Communications in this number. We must content ourselves, without further notice, by referring the reader to the papers themselves.

This journal plan of publishing State Medical Society Transactions is original with the Virginia Society, and commends itself to every one who examines into it. The advantages are obvious, and numerous—both to the Society and to the authors of papers. Those who have sacrified time, and bent their energies and abilities to prepare thorough reports on any subject, are entitled to have a larger reading circulation than is given by the usual form of society publications. Generally speaking, the entire number of copies of Society Transactions does not exceed 300 or 400 copies, and these are mostly distributed to the profession within the State. The Transactions of the Virginia Society, by adopting this journal-plan, have more than 3,000 readers, scattered through every State and Territory of the Union, and in Canada and Europe, etc. This is a larger circulation, we believe, than is given by any other leading medical journal published in the South or West. Such a circulation affords in itself a stimulus to authors to write only what is worthy of record, and to prepare their papers with the utmost care; while it also throws a responsibility upon the Publishing Committee which each member feels and appreciates.

Dr. J. Marion Sims will return from Paris to his home in New York about September 1st, 1878, with the intention of remaining in America. He has been making some "*Remarks on Battey's Operation*" in the *British Medical Journal*, in its issue of December 8, 15, 22 and 29, which are of great practical interest, and an analysis of which we shall present in our February number.

A New Inhaler for Anæsthetics, etc.—The attention of the profession is called to an ingenious apparatus, devised by Dr. A. Speirs George, of this city, for the administration of chloroform, ether etc. We have long been advocates of the use of the towel or handkerchief plan of administering anæsthetics, as is common at the South, and have been opposed to the use of any instruments heretofore brought to our notice designed for the purposes alluded to. But we confess to "capture" by the apparatus now brought to notice, which apparatus combines at once all the advantages, *and more*, of the handkerchief plan of *chloroform* administration. The instrument consists of an oblong conical cylinder, which folds upon itself. Within the cylinder and near the top of the instrument, when extended, is a pocket, in which rests the flannel or sponge to receive the anæsthetic used. The pocket is so constructed that a continuous column of air can pass between it and the sides of the inhaler proper. The top and sides of the inhaler contain slides, by means of which more or less air can be admitted or excluded as required during the administration of any anæsthetic. The top of the pocket is concave and perforated. The preparation used can be poured through the top, and the anæsthetic agent, falling upon the concave surface of the instrument, passes through the perforations alluded to, and is taken up by the sponge or flannel within the apparatus, thus enabling the practitioner to replenish the instrument, when required, without removing it from the face of the patient.

The interior of the instrument, when closed (which looks like a cup), contains a bottle, which can be kept filled with chloroform ready for immediate use as required—as in cases of convulsions, diagnosis, obstetric practice, etc. Within the box containing the apparatus, is a flannel sack. This can be pulled over the instrument to keep it warm, when from long and continued use, and consequent evaporation of the anæsthetic, it becomes cold. Whenever desired, the instrument can be instantly removed from the face of the patient; and when not in immediate use, the slides can be closed and the apparatus placed upon a pillow. The pillow, being soft, conforms to the bottom of the instrument, retaining the vapor within, to be again used from time to time as required. The portability of the apparatus is such that it can be readily carried in the coat pocket, and for Army, Navy or general use is believed to be the safest and most compact apparatus for inducing anæsthesia yet brought forward.

The instrument has been thoroughly tested by various surgeons and physicians in this and other communities, and all who have used it, or seen it used, have pronounced it to be in every

respect as safe as the towel or napkin which have been so generally used for administering anæsthetics. As the instrument will only be used by or under the direction of medical men, no special remarks or instructions are deemed necessary. Messrs. George Tiemann & Co., New York, manufacture the instrument.

The Pinel Hospital.—This Institution, established a little over a year ago, has thus far been a success, and bids fair to become exceedingly useful in the future. Although an innovation in this State, it has been well patronized, having more than fulfilled the expectation of the Board of Managers. One hundred and thirteen patients have been admitted during the past year; 30 patients have been cured, 9 surgical operations performed, and 9 deaths. The percentage of cures is unusually large, when we bear in mind that only the most hopeless cases of inebriates and of mental diseases remain there under treatment for any length of time. In the list of cures are not included cases sent merely to be restrained during a periodical excessive indulgence in alcohol; but to this class, however, belong two-thirds of the deaths which have occurred.

The buildings have been considerably enlarged by the addition of another story to the main building. The grounds are beautifully and tastefully laid. About one hundred patients can be accommodated in the Pinel Hospital.

Bill to Regulate Practice of Medicine.—We commend the move made by Dr. T. J. Riddell, of Richmond, Va., with reference to the passage of a law by the Legislature of Virginia, for the protection of the medical profession of Virginia. The bill is now before the Senate, and it is earnestly hoped that it will meet with the unanimous approval of the General Assembly. Dr. L. R. Chiles, Senator from Chesterfield county, is moving in the matter. The bill provides that practitioners shall be graduates of recognized colleges.

Medical Experts Must Testify.—The Supreme Court of Alabama has recently rendered the following decision: "A physician, like any other person, may be called to testify as an expert in a judicial investigation, whether it be of a civil or criminal nature, without being paid for his testimony as for a professional opinion, and upon refusal to testify, is punishable as for contempt." This decision may be according to law, but is certainly unjust. The profession should at once, as one man, seek to secure a modification of any statute which allows one party to take from another his *property* without just compensation. The thing is all wrong.

Valentine's Meat Juice has been shown to have new virtues. For the *nausea of sea-sickness*, it is declared to be an invaluable remedy by no less an authority than the surgeons of the Cunard steamers. More recently, parties in this city have tested the agent while going from Norfolk to New York by the ocean route, when the sea was rough. "Frequent imbibitions from a bottle of Valentine's Meat Juice" always seemed to ward off the sickness. This suggestion is an important one in view of the number of physicians and patients who now-a-days visit Europe, or make sea voyages. Also notice the letter of Dr. J. B. McCaw, in the advertisement of the "Meat Juice."

Another use of the Meat Juice recently made known is that of a *beverage*, instead of alcoholic liquors, when the system has been physically and mentally overworked. This use of the *Meat Juice* was suggested by Dr. Richard McSherry, of Baltimore; Dr. Miller of Washington, also calls attention to this virtue. The well known actors, Joseph Jefferson and Fetcher, and Charlotte Cushman (for years previous to her death), it is said, have for some years constantly used it; and Sir John Roe Read, a distinguished English traveller in the Western Territories, uses it as a drink in preference to wine. Many other instances of its use might be named, had we the space. But what we have said, upon the evidence of parties named, should lead the profession to make a more systematic application of the Juice.

This Issue of the Monthly proper contains only 48 pages, because of the number of pages occupied by the *Transactions of the Medical Society of Virginia*, 1877. The number of pages omitted will be made up in the February and March issues, so that the fourth annual volume of the journal will contain the promised 960 pages, and *in addition*, 192 pages of Society *Transactions*, making a completed volume of 1152 pages of medical reading matter.

For reasons which will be appreciated, we have also used in this number Original Communications chiefly from Virginia authors.

The delay in the publication of this number has been due to unavoidable circumstances.

Baltimore Medical and Surgical Society.—At a meeting held January 3rd, 1878, the following annual officers were elected: Dr. W. J. McDowell, President; Drs. A. Friedenwald and J. J. Caldwell, Vice Presidents; Drs. Geo. H. Rohe, G. L. Wilkins and B. F. Leonard, Secretaries; Dr. Wilmer Brinton, Treasurer.

Dialyzed Iron Successful in a Case of Arsenical Poisoning. Dr. T. B. Reed, of Philadelphia, has recently reported (*Medical Times*) the case of a young lady who inadvertently swallowed a considerable quantity of arsenious acid. The symptoms of arsenical poisoning were well marked when he saw the case. He at once administered two drachms of Wyeth's solution of dialyzed iron, largely diluted with water, with prompt relief. Richard V. Mattison, Ph. G., in reviewing the subject (*Amer. Jour. Phar.*, Jan., 1878), remarks with reference to this case, that "the treatment pursued, while successful, does not convince us that it would, in a similar case, be at all proper or justifiable to rely entirely on the solution of dialyzed iron as an efficient antidote, if not followed by the free use of sodium chloride" (common salt). The case as reported by Dr. Reed is nevertheless a clinical triumph; but it cannot do any injury at the same time to advise the additional use of salt, as suggested by Mr. Mattison.

Utah's Climate for Health.—The *Salt Lake Tribune* of January 1st, 1878, contains a short article from a leading physician of that city of great interest to invalids and to the profession throughout the country. The reports are of especial value in regard to consumptives and asthmatic sufferers. The article also contains an analysis of the waters of the Great Salt Lake and of several of the more important mineral springs. We regret that we have not the space to do more than to call attention to the article and state where it may be found.

The Therapeutical Society of New York City was organized at the residence of Dr. Andrew H. Smith, on October 2d, 1877, with twenty-five of the leading practitioners of the city as members. Precise and definite points in relation to the action of specified remedies under specified conditions will be given out, and the members are to employ every opportunity which their practice affords to accumulate accurate observations on these points. "Each Committee, having an evening or part of an evening assigned to it, shall prepare a written report of its observations and conclusions, which, after being laid before the Society, shall be given to the Secretary for publication." The membership of the Society is limited to forty. The meetings will be on the second Friday evenings in February, April, June, October and December. The officers elect are: Drs. J. R. Leaming, President; E. R. Squibb and John C. Peters, Vice President; A. H. Smith, Recording, and E. C. Seguin, Corresponding Secretaries.—*N. Y. Med. Jour.*, Dec. 1877.

Advertisements.—An important part of every medical journal is its advertising department. It is of interest to every practitioner. Our advertising pages, always full, are unusually complete and attractive in this number. We shall hereafter devote more special attention to these pages, and shall furnish an index to advertisers as regularly as we supply a table of contents to the reading matter pages. The advertising department will be regularly paged, beginning with this January number, 1878.

Among our new advertisements in this issue are

Galvano-Faradic Manufacturing Company who have electrical instruments of all descriptions for medicinal purposes, used and recommended by the leading electrologists of the country.

Bullock & Crenshaw's sugar coated *pills* which have been used with entire confidence by the profession of the whole United States since 1858.

Retreat for the Sick which was fully noticed in our October number, 1877.

Merrick, Otis & Co., advertise the best article of phosphorized cod liver oil that we have used or seen. We have not clinically tested the other articles named by them.

Scott & Bowne introduce Scott's emulsion of pure cod liver oil with hypophosphates of lime and soda, which is certainly well recommended, but we have not put the preparation to practical test ourselves.

Colden's Liebig's Liquid Extract of Beef and Tonic Invigorator has the testimonials of a great many of the leading practitioners of America who have used it with remarkable beneficial results.

Trommer's Extract of Malt Company have a new advertisement of extract of malt with cod liver oil and phosphorus.

Cinchonia as a Substitute for Quinia has the advantages of being both cheaper and tasteless. As to the relative value, in the Madras trials in 1866, the ratio of cures per 1000 were 977, while from sulphate of quinia there were 993 cures per 1000. When a drug cures 97 per cent. of cases, it comes to rank as a specific antiperiodic. Cinchonia alkaloid has been kept by pharmacists for more than forty years, but the profession of this country is indebted to Messrs. Powers & Weightman, of Philadelphia, for their active interest in bringing it into prominent notice. They overcome the disposition of the powder to form into small lumps, which prevents its ready mixture with liquids, by mixing twelve parts of cinchonia with sixty of sugar of milk, and adding one part of bicarbonate of soda. This "Cinchonia Mixture," as they term it, will readily mix with milk or cream,

and forms a *tasteless* compound. Its administration should be followed by a glass of water, and *after an interval of half an hour*, by acidulous drinks. But an emulsion of cinchonia with gum arabic or other substance develops a bitter taste. Hence the importance of the "Mixture" named above. The dose of cinchonia is about the same as that of sulphate of quinia.

The Founding of the Woman's Hospital of the State of New York has been ascribed to Dr. Silas D. Scudder, of Brooklyn, in an obituary notice of him in the *New York Herald* of December 27th, 1877, the *Brooklyn Eagle*, and other papers. The statement is made evidently by a writer or writers who show ignorance of the facts. Dr. J. Marion Sims was the founder, as every medical man in the country knows, and was the only physician and surgeon in charge from its beginning, in 1855, to 1862. Indeed, for the first six months, Dr. Sims was its *only* physician and surgeon.

The Summer Session of the Medical College of Virginia, advertised in this number, offers advantages which are recognized and felt by all who have attended lectures at this College. The Summer Faculty is both competent and efficient. We cannot too emphatically commend this Course to any one who proposes to enter this year upon the study of medicine.

The Medical Association of Louisiana, at the meeting for organization, January 15th, elected Dr. J. C. Egan, Shreveport President; Drs. S. M. Bemiss, Hayes and Dupre, Vice Presidents; Dr. Thomas Layton, Recording Secretary; Dr. S. S. Herrick, Corresponding Secretary; Dr. Stanford E. Chaillé, Orator. The second annual session will convene on the second Wednesday in April, 1879.

Extract of Eucalyptus has been successfully used as a local anæsthetic for dental operations. Apply one drop on cotton to the sensitive dentine just before excavating.—*Am. Med. Bi-Weekly.* Why not test its anæsthetic virtues in other painful conditions of exposed nerves?

Visitors to the Medical Society of Virginia, 1878.—It is a great pleasure to announce that we have reason to expect the attendance of Honorary Fellow, Dr. J. Marion Sims and Dr. Lewis A. Sayre, of New York, and Dr. Robert Battey, of Rome, Ga., upon the ninth annual session of the Medical Society of Virginia, to be held in this city next October.

Specimen Copy Orderers of Journals, who send postal cards and no money, are receiving just rebuke at the hands of several of our confreres. The *American Practitioner* started the ball; the *New Orleans Medical and Surgical Journal* followed, by publishing the name of O. H. Curtis, No. 130 Third street, Milwaukie, Wis., as one of this sort; and now the *St. Louis Clinical Record* publishes the name of G. P. Sylvester, of Galt, Canada, as another of these dead beats. Fortunately, for the last two years we have not been much troubled with these "dead beats." Our clerk has standing instructions that, when such a postal card order, or a letter without money comes in, he must send in return one of our circulars, marking distinctly the sentence which says, "Useless waste of stamps or postal cards to send for specimen copy unless each order is accompanied by 30 cents." Honest people at once see that we are right in charging cash, and remit in due form; dishonest persons of course are disappointed in their effort at stealing.

Dr. M. M. Walker has been re-appointed by Governor Holliday as the Surgeon to the Virginia State Penitentiary, at Richmond.

Obituary Record.

James McAlister, M. B., formerly Surgeon-in-charge of Her Majesty's 1st Regiment Bombay (India) Light Cavalry, but more recently assigned to duty in charge of the hospital for Leprosy, etc., at Tauna, died September 2nd, 1877. A short letter from Surgeon-Major W. Niven of Tauna, to Dr. Henry B. Baker, Secretary of the Michigan State Board of Health, brings this sad intelligence to this country. He died rather suddenly of remittent fever. Typhoid symptoms supervened with effusion on the brain. Dr. McAlister was one of our most highly prized foreign correspondents and subscribers.

Miscellaneous.

Amputation by Ligature.—Dr. Bitot (*Le Progrès Médical*, Dec. 15, 1877) advocates the use of the ligature in certain cases of amputation of limbs. The bones as well as the soft parts may be thus divided. Disarticulation is accomplished more rapidly than amputation in the continuity of the bones. So long as the epiphyses are not united, separation of the limb at the point of junction with the diaphysis is easily accomplished—a less dangerous operation than disarticulation.

Of course, the ligature is not expected to replace the knife in ordinary cases; but cases do occur in which the patient abso-

lutely refuses the latter. In such cases the practitioner will be glad to have another means at his command, however defective it may be. Dr. Bitot relates an instructive case, which will be followed by others. The case was that of a man born in 1811. In 1851 he had a fall from a horse, in which the right knee was seriously contused. This was followed by great pain and stiffness of the joint. In 1854 a small tumor was noted in the articulation, which did not yield to ordinary treatment. The tumor enlarged and was finally pronounced to be malignant. Amputation of the thigh was advised, and the operation performed in November, 1857. The disease returned in the stump, following a severe injury, eight years afterwards. The patient absolutely refused re-amputation. The growth was of fungous character, and alarming hæmorrhages occurred on several occasions. In November, 1866, more abundant hæmorrhage occurred. This was arrested by passing a new cord, of the diameter of an ordinary pencil, around the stump about an inch above the growth. This was made tight enough to arrest the circulation below it; ice was applied which arrested the pain caused by the pressure of the ligature, and, at the same time, kept the latter soft and facilitated its passage through the tissues. The cord was tightened, from time to time; thus it sank deeper into the flesh, and was followed by cicatricial tissue. At the end of fifty-seven days the diseased mass was removed with the knife and scissors, very slight bleeding occurring. In eight days the patient was up, and has remained in perfect health ever since. During the course of treatment, and for three years afterwards, the patient took twenty-five or thirty drops of perchloride of iron in sweetened water, in three doses daily.—*St. Louis Clinical Record*, Jan., 1878.

Excessive Lactation in Nursing Women is often one of the most difficult complications which we encounter in practice. It is not only unpleasant and painful, but frequently debilitating to the mother. An obstinate case of this character is mentioned by Rehan (*Przeglad lekarski*) in which frequent catharsis with the internal administration of iron and quinia, failed to diminish the amount of milk. At the end of one month, during which the iodide of iron, quinia and salicylic acid were given, and the induction current used, the amount of milk secreted was just one-third the previous quantity, and both mammæ were diminished in size. In two months the woman had regained her former strength. The reporter of the *Allg. Med. Central Zeitung*, in commenting on this case, expresses the opinion that ergotin, either by the mouth or subcutaneously, would have produced the same results in a much shorter space of time.—*The Clinic*, Jan. 19, 1878.

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Original Communications.

ART. I.—*Is Quinine an Oxytocic?* By MERIWETHER LEWIS, A. M., M. D., Lenoir's, Tennessee.

Never before in the annals of medical journalism has this question been so keenly discussed, *pro et con*, as at the present time. Nor is it strange that it should be, for to the entire profession, and especially to us of the South and West, it is a question of vast importance. Indeed, the only surprise an examination of the subject excites is, that it has not long since been definitely settled. Is quinine so mysterious, are its actions so subtile and obscure, as to keep it *sub judice* forever? We think not.

In our humble opinion, sufficient testimony has already accumulated to entitle us to a decision from our medical authors and teachers—a decision which, having the stamp of authority, shall reduce this subject from a debated question to a fixed and settled fact. What that decision will ultimately be is distinctly shadowed forth in the evidence examined in this paper. Let us, then, who constitute the great body of the profession, while anxiously awaiting the *dicta* of authority, carefully record our clinical facts, so as to present an array of evidence so vast as to make the decision easy and final.

In examining this subject, we do not propose so much to give our own views, as to collect, so far as we can, the scattered evidence *for* and *against* its oxytocic action, and from that evidence

to draw only such conclusions as may be logically and legitimately deduced.

We will examine it under the following heads: 1. Has quinia power to originate and sustain expulsive contractions in the gravid uterus of woman, or of the lower animals? 2. To what extent has the supposed oxytocic action of quinia been really due to malaria? 3. Has quinia the power of increasing the frequency and intensity of uterine action during labor?

We will discuss these questions *seriatim*, in a fair and impartial manner, and will neglect no accessible evidence bearing upon either side of the subject.

(1). *Has quinia power to originate and sustain expulsive contractions in the gravid uterus?* Attention was first called to this subject in 1855, by Dr. I. S. Wilson, in the *Southern Medical and Surgical Journal*. He claimed that it exerted decided influence as an oxytocic, which assertion he sustained by another article, in 1860, in the *Southern Journal of Medicine*. In 1858, Dr. J. J. West, in the *Savannah Journal of Medicine*, asserted "that many regarded the use of quinine as dangerous, and even criminal, in any disease in pregnant women." But it was not until 1871, when Dr. Monteverdi published in the *Annales et Bulletin de la Société de Gand* his views in regard to the oxytocic powers of the drug, that the subject received much attention. In 1871, he communicated to the *Nuova Liguria Medica* (*vide* London *Lancet*, Sept. 2, 1871) the results of his experiments made with the sulphate of quinia. In this paper, he asserts that within half an hour after the exhibition of the drug, uterine contractions occur closely resembling ordinary labor-pains, and lasting about two hours. He believes that four grains (!) are amply sufficient to expel both fœtus and placenta; that it is far preferable to ergot; and that during the period of gestation, the utmost caution should be used in its administration lest abortion should occur.

Since 1871, various articles have appeared, from time to time, advocating similar views, and we now proceed to their examination.

Dr. Hiram Plumb, of Red Creek, N. Y., states that he gave a woman flooding from placenta prævia three grains of quinine which produced contractions so promptly that delivery was safely

accomplished before his ergot and instruments could be brought. (*American Journal of the Medical Sciences.*)

Dr. W. L. Lincoln, in his "Report to the Minnesota State Medical Society," believes strongly in its efficacy as a parturifacient in five-grain doses. (*Half-Yearly Abstract*, H. C. Lea.)

Prof. L. A. Sayre, the worthy peer of John Hunter or Ambrose Paré, reports a case of labor following the administration of quinine; but as other means were used to induce it, he wisely hesitates in designating that drug as the cause. (*Amer. Journal Medical Sciences.*)

Dr. G. E. Beeman reports a few cases of impending—indeed unavoidable—abortion in which small doses of quinine were used, and naively supposes the quinine to be the true cause of the miscarriages. These cases are not given more in detail from the fact that the conclusions deduced by Dr. Beeman have been refuted, *ad nauseam*, in the same journal in which they made their appearance (*American Medical Bi-Weekly*).

Having thus given all the facts that we can find in favor of the affirmative of this question, we now proceed to the consideration of the facts bearing upon the negative.

Dr. H. O. Seeds, of Texas, after twelve years' experience in an intensely malarious district, giving quinine irrespectively of pregnancy, and closely watching its effects, has never seen the slightest manifestation of ecbolic power. Furthermore, he tells us of a woman who, after taking seventy or eighty grains in order to produce abortion, went, nevertheless, to full term. (*American Journal Medical Sciences.*)

Dr. R. H. Rutland, of Colorado, has used quinine for eighteen years without ever seeing any ill effects on pregnant women. (*Ibid.*)

Prof. Wm. B. Atkinson, in his excellent little work on the "Obstetric Procedure," while liking quinine as a general stimulant in parturient cases, does not claim for it an oxytocic action.

Prof. Wm. Goodell, of Philadelphia, is of the opinion that the uterine action of quinine "is slow and uncertain." (*Nashville Journal Medicine and Surgery.*)

Dr. H. B. Washington, of Augusta, Ga., one of the leading physicians of that State, gives his views and experience as follows: "Any one acquainted with the medical practice in vogue

some thirty years ago, knows very well that quinine was freely administered to pregnant women, and no one ever saw labor-pains brought on by quinine." He had administered quinine, in five-grain doses, every three hours for fifteen days antecedent to delivery, the woman missing her calculated time by only ten hours. In conclusion, he urges that no woman should be allowed to suffer from any intermittent or remittent complications anterior to her normal labor, through fear that quinine "may prove such an ecbolic as to cause her to miscarry." (*Nashville Journal Medicine and Surgery.*)

Dr. R. L. Knox, of Mississippi, tells us that he very frequently gives as much as twenty grains of quinine to pregnant women without ever producing uterine contractions.

Dr. A. Craig, of Kentucky, in his pen-and-ink assault upon Dr. Beeman, after showing the Doctor's logic to be of the *post-hoc, ergo, propter-hoc* order, goes on to say; "Living in a region where malarial disorders prevail, I have frequent occasion to administer quinine to pregnant women, and from a large experience I am satisfied that it has no specific influence, either in inducing or in accelerating labor." He then closes by making from Bouchardat's "Hand-Book of Materia Medica" the following extract, to which we would call the particular attention of the reader, as it expresses the well-founded opinion of one of the greatest minds of our age: "Many have thought that the sulphate of quinia, in a large dose, will produce abortion; *but very numerous observations have proved that this salt cannot in any degree excite uterine contractions.*"* (*Am. Med. Bi-Weekly.*)

The distinguished Dr. A. S. Wetherly, of Montgomery, Ala., who has been using quinine for twenty-five years, in an able article in the *Richmond and Louisville Medical Journal*, says: "I am satisfied it (quinine) will much oftener arrest uterine action than it will produce it." He states further, that Drs. J. B. Gaston, W. O. Baldwin and R. F. Michel were appointed a committee by the Montgomery Medical Society to experiment with quinine in regard to its asserted oxytocic action. Sixty grains of the drug were given to one woman in forty-eight hours, and ninety grains to another in seventy-two hours, without the slightest ecbolic effect. To the pregnant lower animals, quinine

*Italics our own.

was administered *per diem until death took place from its toxic effects, without a single delivery.* The Doctor used it himself, in ten-grain doses every six hours, in two cases threatened with abortion—the only result being the happy one, that all pains soon ceased and the cases went to full term.

Dr. W. F. Hyer, of Mississippi, who has had an experience of eighteen years' practice in a malarious district, feels satisfied that quinine "has no oxytocic properties whatever." He further relates two cases in which he gave large doses of quinia to pregnant women with the happiest result. (*Am. Med. Bi-Weekly.*)

In a very excellent article in the *Am. Med. Bi-Weekly*, Dr. J. P. Thomas, of Pembroke, Ky., says: "For twenty years I have constantly administered quinine to pregnant women in every stage of gestation for the relief of all diseases of malarial origin or malarial complication, and have the first case yet to present itself in which I could correctly or justly attribute to this drug any special effect upon the womb." In one instance, in which it was deemed expedient to induce abortion, quinine was given by the Doctor in from five to thirty-grain doses, repeated, as often as the effects upon the head would permit, for several days; and then continued in fifteen-grain doses, twice *per diem*, for four or five days, without producing any effect upon the uterus or its contents.

Dr. N. L. Guice, of Mississippi, states that he administered sixty grains of quinine to a woman, in order to test the powers of the drug in producing abortion, without effect. He gave it in ten-grain doses every three hours. (*Ibid.*)

Cazeaux in his great work, *Midwifery*, (sixth edition, page 445,) says: "For my own part I have had occasion to use it (quinine) six times at various periods of pregnancy in doses of ten, twelve, and even fifteen grains in the twenty-fours, without having had to repent of it. Many practitioners, who, like MM. Thezet, Delmaz, Alamo, and Ebrard, have long practised in localities where this fever (malarial) is endemic, have never been obliged to complain of the action of sulphate of quinine when administered during pregnancy."

At a full meeting of the London County Medical Society, at London, Tenn., we requested the individual experience of the members in regard to the oxytocic action of quinine. All, with-

out an exception, were of the opinion that quinine could not originate uterine contractions; but, on the contrary, that impending abortions were often averted by its use in prompt and efficient doses.

My partner, Dr. B. B. Lenoir, who, for thirty years, has been engaged in an extensive practice, and has given quinine regardless of pregnancy, has never yet witnessed any oxytocic effects from its administration.

Prof. Chiara, of Milan, states (*L' Union Medicale*, 1873,) that in his public service two grammes (over thirty grains) of quinine were given to each of eight women, all in the eighth month of pregnancy, without effect.

Prof. H. C. Wood, to whose able work on Materia Medica we are indebted for many facts incorporated in this paper, is of the opinion that quinine is not an oxytocic.

Dr. Robert Battey, the distinguished normal ovariotomist of Georgia, believes from long experience that quinine has no oxytocic action. (*Private Letter.*)

Let us now examine briefly the opinions of the leading European authorities. We will name Binz, Brequet, Ranke, Shulte, Kerner, Zuntz, Scharrenbroich, and Sée, in the full assurance that men more eminently qualified, or more profoundly versed in the physiological and therapeutical action of drugs, and especially of quinine, are no where to be found. They tell us that quinine diminishes the force and frequency of heart-action; lowers the temperature and lessons arterial tension; is an active poison to the lower animal and vegetable organisms; checks the amœboid movements of the white-blood corpuscles, and, consequently, diminishes the formation of pus; retards oxygenation and prevents tissue change; and in ten-grain doses lessens the excretion of urea by one-third. All this and more, and yet not a word, so far as we can learn, of its being an oxytocic.

We have briefly looked through about a thousand numbers of medical journals, and some hundreds of systematic works, without finding a single prominent authority for asserting quinine to be, *per se*, a direct oxytocic.

Looking over our own obstetric record, it appears that in fourteen cases of labor in which we gave the drug impartial trial, no oxytocic effect was produced, much to our disappointment, as

we, also, "desired to have somewhat to write" for the journals on that side of the question. In one case, of which we have not the notes, but in their stead a most lively recollection, for, indeed, *magna pars fuimus*, two physicians were much annoyed by a young woman who was afflicted with a persistent headache. Approved treatment was employed for weeks without effect, when the younger M. D., in sheer desperation, prescribed fifty grains of quinine. This was taken at one dose, producing some prostration, but giving relief for several days. Some months afterwards, it transpired, much to our astonishment, that at the time of taking the fifty-grain dose, she was three months advanced in pregnancy. Having often laughed over giving such an enormous dose, it was distinctly remembered, and we must confess that in spite of the honored maxim "that one swallow does not make a summer," our faith in quinine as an oxytocic fell decidedly below par.

The reader will easily perceive that the foregoing evidence, which we have most carefully collected, presents overwhelming proof in favor of the negative. Only certain parts of this testimony will require examination. For instance, in the case of Dr. Hiram Plumb, no sensible physician will fail to see that three grains of quinine were totally inadequate to produce a prompt and safe delivery in case of placenta prævia. It would be strange indeed, and most homœpathic, if three grains of the drug, even in the potent hands of Dr. Plumb, should do more than the eighty-grain dose mentioned by Dr. Seeds, or the fifty grains alluded to by ourself.

Dr. Lincoln, it seems, gives five grains of quinine, and then, *ab alto toro*, watches the progress of the labor. To his evident delight, he sees the pains increase in frequency and power, until the case is at last, *laus quiniæ*, completed. In all this Dr. Lincoln sees only quinine, while the unbiased physician, who has learned to distinguish true causes from merely attendant circumstances, sees only the natural history of a case of normal labor.

Furthermore, since, as we have stated, we have been unable to find a single prominent authority in favor of the affirmative, we may justly infer, *ipso facto*, that all great authorities at the present time are non-believers in the so-called oxytocic powers of quinia. For it is not to be doubted that if M. Sée, for instance

in his elaborate investigations of the drug had discovered any such property, he would have failed to proclaim its wonderful effects, together with his own fame to the world. Again, it is contrary to the experience of the great body of Southern physicians, men every way qualified both for observing and recording clinical facts, that quinine has such an effect; and it is equally contrary to common sense, to believe that if it did, the fact should have so long escaped their attention. Indeed, had quinine the ecbolic power attributed to it by Dr. Beeman and a few others, to what interposition of Providence do we owe the fact, that our Southern land is not billowed with infant graves and our race exterminated?

Finally, we state that in the discussion of this subject, the *onus probandi* rests, of course, with the affirmative. It is plainly to be seen, that the arguments on that side are based upon insufficient facts; that they are vitiated by unintentional fallacies; that the natural history of parturition has been assumed to be the effects of a certain drug; and, consequently, that they *prove nothing*. In order to prove quinine to have ecbolic power, it should have been shown that always, or in the great majority of instances, its administration was followed by uterine contractions. (*Mill's System of Logic.*) This has not been done, but, *per contra*, a sufficiently large number of instances have been given, *proving* that even when pushed to extreme limits, it has not been followed by oxytocic action, and the conclusion is accordingly reached *that quinine is not an oxytocic.*

We now come to the consideration of the second question to be examined in this paper, namely: *To what extent has the supposed oxytocic action of quinia been due to malaria?* It is a fact well known to all intelligent physicians, and one fully sustained by the observation of all who have practised in malarial districts, that the subtle chill-poison, producing, as it so often does, the most intense internal congestions as well as profound perturbations of the nervous system, is a potent cause of both abortion and premature delivery. Indeed, so completely does the system of the mother sometimes become saturated with malaria, that even the unborn child, so thoroughly secluded, as it would seem, from the outside world with all its deleterious influences, becomes effected with well marked chills. (Jacquemier, *Traité d' Obstet-*

rique.) We have seen a regular tertian fever in a child only five days old, whose mother had undergone a protracted attack of the disease during the latter months of her gestation; and similar cases are on record, if we remember correctly, in the medical journals both of this country and of France. Prof. H. C. Wood (*Mat. Med. and Therapeutics*), in answer to the assertion that quinine produces the many abortions of malarious districts, says: "It seems to me incredible, in the face of daily experience, that even the largest therapeutic doses of quinine are abortifacient in malarial fevers or in health." In short, he believes the abortions to be the result of *malaria* and not of *quinine*. This, beyond all doubt or question, has been the *fons et origo* of the oxytocic action of the drug; just as syphilitic abortions were formerly thought by many to be the result of mercurial treatment, whereas now, it is everywhere acknowledged and taught, that an active anti-syphilitic treatment is the surest means of averting such abortions.

Cazeaux is brief and decisive on this point, thus: "The miscarriages laid to the charge of sulphate of quinine should certainly be attributed to the disease itself (intermittent fever), and not to the remedy." Dr. Robert Battey of Georgia, and many other distinguished Southern physicians, fully concur in the views of the celebrated Frenchman. But why multiply authorities? The fact that quinine has been assumed by careless and illogical observers to be the cause of abortions, while the true efficient cause, *malaria*, was overlooked, is already sufficiently established.

Let us, now, examine the third and last question, namely: "*Has quinine the power of increasing the frequency and intensity of uterine action during labor?* This is still an open question, and one which, in the present state of our knowledge in regard to the action of quinine during parturition, it is impossible to answer. The drug has been used but little in parturient cases; hence, as Prof. H. C. Wood remarks: "There is no general experience upon the subject." As already stated in this paper, we have given it fair trial in fourteen obstetric cases without, so far as we could ascertain, any results whatever, although the orthodox fifteen-grain doses were administered.

Others, however, have had excellent results. Dr. Albert H. Smith (*Transactions of the College of Physicians and Surgeons*

of Philadelphia), says of quinine: "It increases the activity of the normal uterine contractions." His views on this subject, however, are so excellent that we cannot refrain from quoting them, *in extenso*, in the following "conclusion": "That quinia has no inherent property of stimulating the gravid uterus to contraction, being inert as to any effect upon the womb in a quiescent state, and having no decided action in accidental labors at any period of gestation. *That to its property as a general stimulant and promoter of vital energy and functional activity, and to that alone,** is due its influence upon the womb in normal parturition; producing then no action peculiar to itself, but merely increasing the power of the uterus to expel its contents by its own natural method, converting what is a defective or even pathological action into a simple physiological process."

Dr. E. T. Easley, of Little Rock, in his valuable paper on "Quinine in Parturition" (*Va. Med. Monthly*, July 1876, page 245), reaches substantially the same conclusions. In these conclusions, our own *experience* to the contrary notwithstanding, we fully concur; believing, on theoretical grounds, that quinine, acting as a general stimulant, will prove beneficial in parturient cases after labor has fairly commenced. The above question, however, must still remain, *sub judice*, until settled by the accumulated evidence of clinical facts.

If, in the above paper, we have succeeded in placing fairly before the profession the facts in regard to this *bitter* subject, we are fully repaid for the labor of placing them on record.

ART. II.—*The Bedford Alum and Iron Springs.* By BENJ. BLACKFORD, M. D., Lynchburg, Va.

The benefits to be derived from the use of mineral waters, poured out by certain springs, were recognized by the old writers of medicine, and were then, as now, recommended in their practice with great confidence. In fact, mineral waters have been used in medicine since the days when Æsculapius was worshipped all over Greece and when his temples were erected in healthy places, near wells which were believed to have healing powers. Like many other important remedies, their virtues have been re-

*Italics our own.

garded with singular skepticism at one time and with blind credulity at another.

That there are great results to be obtained in the treatment of many diseases, which do not respond to the action of medicine, by the proper administration of mineral waters, cannot be denied. This is, to a great extent, owing to their dilution. It is generally known that a mineral water is merely a complicated medicine, containing various salts and gases blended together; the different substances are largely diluted with water, and thus are more readily assimilated throughout the entire system than when given in the form of medicine. Mineral waters are useful chiefly in chronic disorders, where there is little, if any, structural change; or in cases where disease is threatened. Hence the sufferers sent to the Springs are, for the most part, affected with cutaneous diseases, rebellious ulcers, chronic gout, rheumatism, sciatica or neuralgia, hepatic or renal diseases, paralytic affections, where all active disease has been subdued, chronic uterine troubles, etc. The profession is familiar with the remedial effects of the waters of Carlsbad, Marienbad, Pullna, Vichy, Kissengen, Freidrickshall, &c., in diseases where the digestive system has been systematically and regularly overworked; and the importation of these waters to this country, within the last quarter of a century, has been immense, to say nothing of the artificial waters—Seltzer, soda, potash, lithia, &c., which are now largely manufactured, and are almost in universal use.

I am not one of those enthusiasts who regard certain mineral waters as a *sine qua non* in the treatment of all the diseases "flesh is heir to;" but I believe that as long as there can be any benefit to be derived in the treatment of diseases by the use of properly adapted mineral waters, we should not go abroad to get them when our own mountains of Virginia abound in mineral springs, the waters of which can be utilized for medicinal remedies with the same beneficial effects as the "foreign waters," now so greatly in vogue. I therefore propose calling the attention of the public to the "Bedford Alum and Iron Springs Water and Mass," which, for the last twenty-five years, has had considerable reputation among the medical profession in this section of Virginia, and has been extensively used, with success, in the diseases for which they are judiciously prescribed.

My own experience justifies me in making a report of several intractable cases which were entirely relieved by the systematic and regular use of this water and mass. I think it but due, not only to the profession, but to suffering humanity, that when great benefits can be obtained from the use of any mineral water, it should be known and the community at large get the benefit of their medicinal virtues, under advice of intelligent physicians.

It is the *persulphate of iron*, *proto-sulphate of iron*, *and the sulphate of aluminum* of this water that demand special attention, as it is on them principally that the therapeutic action of this water depends, rendering it, in an eminent degree, tonic and astringent in its effects. It is not the mere fact of containing these salts, but its richness in them, with the other salts, that has gained for this water such a favorable reputation for therapeutic purposes. In comparing the analysis of the "Bedford Alum and Iron Springs" with that of some of the celebrated spas of Germany, I have been struck with the similarity to the analysis of the spa of *Kreuznach*, in Rhenish Prussia, (in the salts of iron, calcium, magnesium, and sodium), which, perhaps, have a greater reputation for the cure of uterine diseases, as well as scrofulous affections, than any other springs in Europe. The Kreuznach waters are known to have proved valuable in congestion of the uterine organs; in hypertrophy and induration of the cervix; in uterine displacements and in derangements of the menstrual functions. In several cases of uterine diseases, *chronic endometritis*, with ulceration of the *os uteri*, and extensive engorgement and induration of the cervix, I have found the use of the "Bedford Alum and Iron Water," applied locally by injection, and taken internally, very beneficial.

Several years ago I was called to attend a lady who had been a great sufferer for years with uterine disease, ulceration and engorgement of the cervix, with copious leucorrhœal discharge. She had been under the treatment of the most distinguished gynæcologists in this country, and was also, during her sojourn in Europe, under the treatment of Professor Scanzoni, of the University of Wurzburg, who recommended, in addition to his treatment, the waters of *Kissengen*. Her health was greatly improved, and almost restored, during her sojourn at these celebrated spas. After her return to this country, she had a relapse of her old

complaint. I determined to try the Bedford Alum Water, which was used locally by injection, and also given freely as a drink. In a short time, her general health began to improve, the leucorrhœal discharge ceased, and all the symptoms of uterine trouble disappeared. I prescribed no other remedy, and, therefore, am satisfied that her improvement and restoration to health was attributable to the use of this water. She has not had any return of her disease since, that I am aware of.

I have had recently a lady under treatment, whose nervous system has been greatly shattered on account of some uterine trouble. Her catamenia have been irregular, scanty and painful; bowels constipated; irritable bladder, and intense sciatica. I have no doubt that this lady has ulceration of the os uteri, and, perhaps, prolapsus. I suggested to her to use the Bedford Alum and Iron Water freely. She has greatly improved, and complains very little of her bladder and sciatica, but she is still under treatment.

Irrigations of the vaginal canal and of the cervix uteri have, of late years, been used with such great benefit that they are now resorted to in the treatment of a large majority of cases, both in hospital and private practice, of various chronic uterine affections. Combine with these irrigations, the use of alum water from these Springs, or prepared from the mass, and the treatment will be much more efficacious than if only simple water is injected.

I know of no remedy more efficacious in the treatment of diseases of a strumous diathesis than the waters from these Springs. In this connection I shall mention a case of an interesting nature. Some years ago, a gentleman of Lynchburg owned a very valuable servant, who was terribly afflicted with scrofula in its most malignant form. There was enlargement and extensive suppuration of the cervical glands, with a broken down condition of system, so much so that I had no hopes of being able to restore him to health with the usual remedies. After a long and protracted treatment, without success, I commenced the use of the "Bedford Alum and Iron Water," taken regularly and freely. Much to my surprise, in a few months he was entirely relieved, and has not, to this day, had any recurrence of the disease.

The experience of my medical friends in Lynchburg, in the

use of this water, has been very satisfactory in the treatment of the diseases for which it is prescribed, and I regret that I have not the reports of some of the cases which have been treated successfully, that I might include them in this paper.

I know of no mineral water in whose medicinal virtue I have more confidence than that of the "Bedford Alum and Iron Springs," and, therefore, I can, with the utmost confidence, from considerable experience in its use, recommend it as a valuable adjunct in the treatment of many chronic diseases and conditions, to which the published analysis would indicate its application. It deserves the high popularity which it enjoys as a most excellent tonic, alterative, diuretic, and astringent mineral water, the merits of which will become more widely known, as it is being extensively used by the medical profession, not only of Virginia, but of other States.

ART. III.—*Reflex Paralysis, with Illustrative Cases.* By JOHN J. CALDWELL, M. D., Baltimore, Md. (Read before the Baltimore Medical and Surgical Society, December 2, 1877).

Mr. President and Gentlemen,—I propose first to call your attention to the case now before you:

Mrs. Emily Jane P., aged 50. Her father and mother reached advanced age, and were free from acquired or hereditary taint. She was married at the age of 26, and has given birth to three healthy children—two living, one deceased. The mother enjoyed uninterrupted health until she had attained her forty-eighth year, when she manifested some of the *malais* incidental to the "change of life."

On the 12th of February last, about the time of her anticipated period, she bailed out the flooded cellar of her residence. The result of the unusual physical fatigue and exposure was the sudden arrest of the catamenial flow—her feet having been submerged in the water. On the night of the above date she retired at 11 o'clock, reposing quietly until 1 A. M., when she arose from her couch to administer to the wants of her little son. Immediately after her return to bed, she was seized with violent epileptic convulsions, which returned, at short intervals, until about 6 A. M. Upon her restoration to consciousness, she discovered that her right arm was paralyzed. About the time of her regular courses, there was a recurrence of the epileptic fits,

which were repeated up to the 1st of November last, when she was referred to me for treatment.

On the return of the third catemenial period, after her first paralytic attack, she was again seized with paralysis, which then attacked her in the left arm. The menses, in each case, were scanty and painful. Her medical attendant, according to her statement, pronounced her seizures as apoplectic; but it was manifest, from their number and character, and the state of stupor and listlessness in which they left her, that she was suffering from epilepsy, attended with reflex paralysis, due to congestion and hyperplasia. Upon my first examination of this patient, I found that there was complete paralysis of motion and partial loss of sensation of the upper extremities—no voluntary movements of arm, hand, or shoulder being possible. The pricking and pinching of the skin were very slightly felt. Faradisation was resorted to with little or no effect, but the continuous current produced gentle contractions of the muscles, with some degree of sensation and pain. Even to accomplish this result, twenty-two cells (Sthorer) were required. After a few applications of the continuous current, we found the faradic current to produce good contractions and sensation. Coincidentally we administered liberal doses of bromo-iodide of potash, in milk, three times a day.

In all, the patient has been under my treatment about two months, and has received thirty applications of the different currents, and has taken from 70 to 90 grains of the bromide mixture per day.

In the above period of two months, this patient had but one seizure; and the use of her right arm and hand is almost entirely regained, with a decided improvement in the left, and with recovery still progressing, from the periphery towards the centre—the fingers being the first, and the shoulders the last, to regain their normal functions.

Commentary.—What was the actual seat and nature of the paralyzing lesion in this case? Cerebral? I should think not. Because, as Althaus clearly puts it, cerebral paralysis almost always affects one side of the body—the face and the leg, as well as the arm. But, in this case, the cerebral nerves and the lower extremities do not at all suffer. This speaks strongly against the cerebral origin of this patient's palsy. Again, in cerebral paralysis, whatever may be the extent of the loss of power, says Althaus, the nerves and muscles always retain their excitability to faradisation. The absence of this excitability induces us to reject the idea that the brain was the seat of the paralysis.

Is it a case of *spinal paralysis?* Not, in my opinion. For, if there had been disease of the upper portion of the cord, or its meninges, sufficiently severe to cause paralysis of motion and sensation of the whole upper extremities, the intercostal muscles and the diaphragm, and the lower extremity, would have participated in the affection.

After excluding these and all the various affections presenting anything like symptoms, we are led to the conclusion that the disease must have been due to some pathological lesion of the uterus and its appendages, resulting from the exposure already referred to, producing reflex paralysis of the upper extremities. We should not consider this reflex paralysis remarkable when we remember the late and able discussion published to the medical world by the good and learned Dr. Lewis A. Sayre, upon reflex paralysis resulting from genital irritation, especially in children, where the prepuce has become agglutinated to the glans penis, and his happy and ready mode of operation for relief of the same.

To illustrate: little Sheffy was brought to my office a few months since, accompanied by his parents and physician, suffering from the aforesaid irritation. His mother informed me that, for a few preceding months he had been extremely nervous, frequently falling on the floor and continually pulling at his privates, and had lost the power of lingual articulation. His age at the time was between 6 and 7 years; his physical condition was otherwise good, and his muscular development most excellent. The mode of operation in his case was to roll back the prepuce and break up the adhesion, and dress the abrasion with lint and water dressings. The result was a perfect restoration of his functions.

Althaus says that the existence of reflex paralysis has often been questioned by many of the best observers, who have attributed the phenomena to some structural disease of the spinal cord, which may have escaped the examination by the naked eye, or even by the microscope. Nevertheless, we believe, with him, that, after duly weighing everything that may be said against this form of palsy, there still will be found cases which may be fairly claimed as belonging to this class.

We also find the physiological basis for this view in the facts

which have been lately discovered concerning the inhibitory system of nerves, by the experiments of Goltz, Löwig, Brown-Sequard, Hammond, and others. They demonstrate clearly that we may temporarily suppress the functions of the cord by producing irritation of certain peripheral nerves.

We remember well a case in point. Mary G—, a servant girl, aged 24, who had her finger caught in a stove-grate, crushing it badly. We were called to see her in the evening of the same day, and found her suffering from reflex paralysis of the lower portion of the body, with slight tetanic convulsions of the face and neck. The use of anodynes, with chloroform, produced very salutary effect.

The authorities already mentioned plainly show that in rabbits, if the kidneys, womb, or intestinal mucous membrane are squeezed, sudden paralysis of the hind legs ensues, with abolishment of reflex excitability; and as soon as the undue pressure was relaxed, the paralysis disappeared.

With regard to the question of the pathology of reflex paralysis, we find cases on record where the sudden recovery of function, after the removal of peripheral irritation, leaves no doubt of the nature of the disease. Landry describes a case of paraplegia from the flexion of the womb; and, when flexion was remedied, the palsy disappeared. And again, Rosenthal has seen a case of paresis of both lower extremities which disappeared on a needle being extracted from the vagina. Althaus gives us a number of cases illustrative of reflex paralysis due to like causes.

We should note approvingly, in conclusion, the classification given by Mitchell of reflex paralysis—

1st. Paralysis arising during disease of the genito-urinary organs.

2nd. Those which occur during, or just after dysenteries, diarrhœas, super-purgation, or in connection with worms.

3rd. Such as arise during or after pneumonia or pleurisy.

4th. Such as are seemingly brought on by dentition.

5th. Paralyses of diphtheria, fevers and eruptive diseases.

6th. Such as seem to be occasioned by cold, or by cold and moisture (which, in certain critical conditions, as illustrated in

the case presented by us this evening, asserted their malign influences).

7th. Paralyses due to external injuries.

8th. Paralyses resulting from certain medicines and drugs.

9th. Paralyses due to great emotional disturbances.

65 *North Charles Street.*

ART. IV.—*The Effect of Diseased Teeth, and of their Loss upon the General Health.* Read before the Abingdon Academy of Medicine, Dec. 3d, 1877. By H. M. GRANT, M. D., D. D. S.

Mr. President and Fellows: Various opinions have been advanced in regard to the manner that diseasen teeth and the loss of them affect the general health. We are well aware that the human system is a delicately formed machine, the functional activity of each part being dependent upon another and sympathizing with the whole. Thus we see

> "From nature's chain, whatever link we strike,
> Tenth, or ten thousandth, breaks the chain alike."

Whenever there is a morbid tendency to functional derangement, however slight it may be, if not corrected at once, it will insiduously work out its deleterious effects in the end. Some organs may be affected from very trifling causes, while others, exposed in the same manner, are seemingly unaffected; but at the same time, the remaining organs are taxed, indirectly, in proportion to the number of links broken in the chain of our being. What, then, must be the effect of a mouth full of decayed and diseased teeth, containing viscid, offensive matter? Even the act of inhalation in such a case carries some of the products of purulent decomposition into the pulmonary air cells, where these purulent products act upon the tender, delicate structures of the lungs. They are also absorbed by the blood, and when they thus enter the circulation, these products of diseased teeth may affect the whole system, producing troubles of a grave character, such as neuralgia, dyspepsia, sick headache, earache, inflammation of the eyes, &c. These affections derange the whole system, and frequently require the services of a physician, or else terminate in a broken-down constitution. When the physician is

consulted for these chronic nervous affections, he often has to refer the patient to the dentist.

Many cases of that dreadful disease which we call neuralgia facia, which have resisted all other treatment, have been cured by treating the teeth, or by their removal. The sensory nerves belonging to the eyes, ear, nose, mouth, teeth, and distributed over the cheek, are branches of the great nerve of sensation, the fifth pair. Hence, whatever part of this chain is irritated, the pain may be experienced in any other part. In addition, the patient generally has a weak stomach, bad digestion, and offensive breath, which result in bad health and low spirits—all for want of good and healthy teeth to masticate food, which is a preparatory process, indispensable to a quick and easy digestion. The loss of these organs in brutes is soon followed by death; but in man they can be restored.

Many writers contend that more than one half of the diseases that afflict mankind arise from a disordered state of the stomach. And why this disordered state of this organ? Dr. Thomas E. Bond has thus poetically explained it:—

"'Tis nature's general plan,
That all the solid al ments of man
Before admission to the secret shrine,
Where vital chemistry with skill divine,
Transforms the cruder mass to milky chyme,
By nature's metamorphosis sublime—
Should suffer communition; hence we find
The dental organs formed to cut and grind,
And masticate the food; this rightly done—
The process of digestion well begun—
Results in health to each dependent part
That feels the living impulses of the heart;
But when, from loss of teeth, the food must pass,
A crude and rigid and unbroken mass,
To the digestive organs, who can know
What various forms of complicated woe,
May rise terrific from that single source!"

Having thus referred the various evils and disadvantages of diseased and lost teeth, to the human system, I wish to impress upon you the vast importance of preserving your teeth and your offspring from decay. Being connected with all the great functions of life, and rendered by nature durable in substance, combining strength with symmetry, and intended to survive every other part, why are these useful organs found decaying before middle age, and even in childhood? We answer, that it is principally due to our unnatural mode of living, the kind of food we eat, and the manner in which it is prepared.

The effect of disease of the teeth upon the general health often

commences in early childhood, when these pearly gems have not yet been erupted. In truth, there are but few organs whose diseases maintain such constant relations to any period of life, as diseases of the mouth, dependent upon the eruption of the teeth, do to that of childhood. It might be almost asserted as an impossibility, that infants could pass through the period ending with dentition, without suffering from some disease of the mouth and other disturbances consequent thereon.

The physiological cause of this association of infancy and disease may be found in the fact of the great activity with which the vital processes are carried on at that period, and their consequent liability to derangement. Secretion is then active; the membranes are exceedingly vascular, and the mucus is copiously secreted upon the mucous membranes of the digestive organs. Any course that alters the quantity, or impairs the quality, of the secretions, or that disturbs vascular action, will be promptly felt by the general system, and produce changes in organs more or less remote from the primary source of disease; and hence we have all of the long train of diseases peculiar to and following dentition. These effects, if not properly treated, may last to puberty or continue in after life.

Again, the nervous disturbances dependent upon a diseased condition of the teeth, or even a single tooth, are frequently so distant from the primary cause as to present serious obstacles to a correct diagnosis. Some of the diseases arising during pregnancy, are often traceable to the oral cavity, and the organs therein contained, as the primary source of trouble.

When the question is asked, how it is that an organ sympathizes with some one in preference to another, we reply, that it is either owing to its contiguity, or is concerned in the performance of the same function, and hence indicating the closest fellowship and most intimate relation. But in the case of the teeth and uterus, there is no such relation, either by contiguity, by direct intercourse through nerves, or by any special connection in the performance of function. Yet it is manifest there must be a relationship, through some channel or other, to explain the presence of the sympathetic symptoms. The question still is, What is this channel of intercourse? A man has locked jaw from injury to the toe—a sympathy even more remote and quite

as obscure as that of the teeth and the uterus. Our own opinion is, that the medium of connection is the same in both cases, and that the sentient track of the spinal marrow is this medium. In the one case, the sentient nerves of the uterus, being impressed by the changes occurring in this organ during the periods of menstruation and pregnancy, reflect this impression to the sentient track of the spinal marrow, whence it is conducted upwards, along this track, to the point where the fifth pair of nerves pass off, and here it takes the route of this nerve—the great sentient nerve of the teeth and face—going along the dental branches where there is pain in the teeth ;* while, in the case of trismus, the impressions are conveyed by reflex action to the muscles of the lower jaw, where the impression from the sentient nerves of the toe are also reflected to the spinal marrow.

Dr. W. Tyler Smith, of London, says : " Irritation of the trifacial nerve has been known to excite abortion. It happens when

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*It seems to us that this explanation is too exclusive, and unless other known facts are brought out in reference to changes occurring in pregnancy and lactation, the line of treatment suggested for some of the troubles incident to these conditions will prove inefficient. Decay of the teeth during pregnancy and lactation are too frequent in practice to require reports of cases to establish the fact. Analyses of the blood in such cases show that the phophorous principles are in excess in this fluid, while they are diminished or altogether wanting in the urine. The legitimate inference from these and other familiar facts is that the excess of the phosphorous elements in the blood goes mainly to the fœtus, in the one instance or enters into the formation of milk in the other ; in either event, the mother suffers for the want of phosphates *for her own system*. In other words, the excess of the phosphates found in the blood of the pregnant or nursing woman is not intended for her at all—it is for the fœtus or the infant. The amount of phosphates essential to a healthy adult is thus diminished, and the mother's system bears the effect of this loss. These phosphates enter largely into the structure of the bones, and of the teeth There is, then, a direct loss of the bone-forming substance in the system during pregnancy and lactation. Reflex sympathy, as explained by Dr. Grant, may cause the effect to be felt more by the teeth than other structures, but the irritability itself is most probably due, in the majority of cases, to the loss of these phosphates. Our attention has often been directed to this subject ; and Prof. J. S. Wellford, of this city, has for some time been making observations which he proposes to publish. This irritability of the trifacial nerve and the decay of the teeth due to pregnancy can in most cases be prevented by a systematic treatment by the phosphates. Dr. Wellford is in the habit of prescribing : R. Tinct. ferri chloridi

Acid phosphoric, dilut. $\overline{aa}$ .....℥j
Quiniæ sulphatis..... ....gr. xlviij
Liquor arsenitis chlor.....℥iss
Strychniæ.....gr. j.
Aquæ puræ q. s.....℥vs.

M. Make a mixture. S : Teaspoonful three times daily.

no cause can be recognized but the appearance of the dentes sapientiæ; and this phase in dentition is known to produce considerable local and constitutional disturbance. General convulsions may, in fact, be excited from this source, either in the male or female subject. The reflection of irritation from the trifacial upon the uterine nerves, in the young pregnant woman, is no more remarkable than the strangury excited by teething in the infant."

In June, 1876, I was called in consultation in the case of a lady who, six days after labor, was attacked with a severe pain in the uterus. It was of an intermittent character, and during the intermission she had very severe and agonizing pain in the face. Leeches, fomentations, &c., were applied to the abdomen, and calomel and opium were given internally. But the pain in the face became more severe; in the language of the patient, it became unbearable, when I was sent for. I found her face covered with flannel, which led me to suspect that some one of her teeth was the exciting cause of the trouble. Upon examination of the mouth, I found the posterior part of the gum of the left inferior maxillary red and much swollen. The mystery was explained. The dentes sapientiæ—the cause of all the pain—were coming up. The gum was freely lanced, and the pain in the uterus from that moment subsided. No more medicine was required or given.

In September of this year, 1877, I was called in consultation by a physician of a neighboring town to see the following case:

Master W. B. S., from an adjoining county, aged 15 years, was attacked about three weeks before the time I saw him with odontalgia, caused by the first upper molar tooth on the right side, which was very much decayed. He retired to his bed at night with very severe pain in the tooth and face on that side. When he awoke the following morning, he could not see with his right eye and but little with his left; blindness continued up to the time I saw him. Upon examination, I found the tooth before mentioned very much decayed and painful to the slightest touch. I advised its extraction, which was done. The same evening the patient could see some out of his right eye, and the dimness of vision of the left was perfectly removed; and only a few days elapsed, as I have since been informed by the attending physician, until his sight was perfectly restored.

The importance of a thorough knowledge of the various evils resulting from the condition of the teeth, is strikingly illustrated by a case to be found in Harris' *Principles and Practice of Dental Surgery*. The subject, D. M., after years of suffering

consequent upon efforts at the eruption of a wisdom tooth, sought relief by a change of climate, in addition to the best medical advice. Both, however, proved unavailing; the irritation extended to the lungs and established a confirmed phthisis pulmonalis, from which he was only relieved by death.

From the various testimonies which we have endeavored to adduce, and sustain by physiological reasoning, we must conclude that this subject is one worthy the investigation of the intelligent physician, it being the primary source of very many of the ills to which frail humanity is heir. And if this hasty and imperfectly gotten up paper can be the means of directing the minds of the Fellows present to this subject, my object will be gained, and my duty as essayist discharged.

Clinical Reports.

Case of Pseudo-Membranous Laryngitis—Tracheotomy—Recovery. By T. J. WHITE, M. D., Uniontown, Ala.

Victor Picard, æt. 3 years and 9 months, oldest child of a Jewish family living in the village of Faunsdale, five miles of this place, while on a visit to Selma, Ala., during the month of September, 1877, was attacked with croup, and was treated for such by a physician of that place. For several weeks he suffered the nightly visitations of simple spasmodic croup which passed off under appropriate treatment, but left some hoarseness and general indisposition the following day, to return again at night. There was some febrile action, but not enough to create much general constitutional derangement.

On the 1st October his mother returned home, thinking his condition improved. On the 2d, I was called to see him. I found him playing about the room, but troubled with considerable stridulous cough and hoarseness; no fever, malaise, external glandular enlargement or dysphagia. In fact, his condition was such as to mislead any physician who would have only made a casual examination; but having had one sporadic case of diphtheria in this place several months previous, and a few isolated cases in the surrounding country, made me more cautious. Upon particular inquiry of the parents, they stated that he had always been perfectly well, stout and robust, and that they felt no uneasiness except from the prolonged and incessant attacks of

croup. I examined the throat immediately, and discovered a few small membranous patches upon one tonsil, but no evidence what ever of any great inflammatory action. The seat of the trouble, no doubt, being located in the larynx, my treatment was directed by this fact. The local treatment was of a simple nature—chlorate of potash being the principal drug. Inhalations of slack lime and the fumes of hot vinegar were kept up as long as the patient would tolerate them. Syrup of ipecac was administered at night as an emetic to relieve the paroxysms. During the day, he was kept upon a mixture of syrup. scillæ comp., ammon. muriat., and mistur. glycerrhizæ—every one or two hours. His secretions were kept up by small doses of calomel and rhubarb.

On the 3d, his condition was not ameliorated; same treatment continued.

On the 4th, no better, but hoarseness slightly increased, with some fever and restlessness, the paroxysms came on every night. At the request of the family, Dr. A. T. Heenley, of Macon Station, was called in. Upon examination, he seemed to suspect diphtheria, in which diagnosis we differed. At his request, however, the patient was put upon iron, quinine and chlorate of potash, with nitro-muriat. acid, dilute. I left the patient in care of Dr. Heenley until I returned home.

In two hours after leaving, I was sent for hurriedly to return, with the statement that the child was dying. I found him in violent paroxysms of suffocation with but few minutes' intervals. Extremities cold, face bathed in a profuse perspiration with some lividity, pulse small and frequent, and continual, incessant jactitations. Mustard was applied, stimulants given by enema and hypodermically, and as soon as he rallied, syrup of ipecac was given to full emesis. In spite of all our efforts, the paroxysms increased in severity and frequency, until death was almost imminent.

To prevent immediate death and to give him the last chance, I proposed the operation of tracheotomy. The consent of the family was readily obtained—in fact, they saw the actual necessity of immediate surgical assistance, and insisted upon my operating without delay, as they had lost one child in Demopolis, Ala., with the same disease—membranous croup. The troubles and obstacles now presented themselves in the want of a suitable tube. Telegrams were sent to Selma and Demopolis for the tube. But the patient's condition required immediate operation.

The child was placed upon a table, chloroform administered, and I commenced by making an external incision from the cricoid cartilage downwards, about one and a half inches in length,

over the medial line of the trachea, dividing skin and superficial fascia. The parts were then dissected and torn through by the handle of scalpel, avoiding blood vessels and the thyroid gland until the trachea was reached. The patient had now ceased to breathe, but the bistoury was forced through the trachea, dividing the first three rings. He was immediately turned upon his side and artificial respiration applied. Upon the first inspiration, violent spasmodic coughing commenced, which expelled the small quantity of blood which must necessarily enter the windpipe. The points of a pair of artery forceps were introduced into the opening and then expanded. It was held open in this manner until retractors were made of wire-loops and fastened around the neck. As soon as the respirations were fully established the relief was perfect, and the child sank into a peaceful slumber, which lasted an hour. From the most horrible and distressing asphyxia he now breathed as quietly as nature could wish. The hæmorrhage was very slight. The operation was commenced at 10 o'clock P. M., and the windpipe was held open by the wire retractors until 7 o'clock the next morning, when a tube was received from Demopolis and inserted without difficulty. The discharge from the tube was of a mucous character, tinged with blood, which lasted about six or eight hours. At the time of the operation the exudation could be seen upon the walls of the trachea. Upon the second day after operation, symptoms of bronchitis supervened, and portions of membranes were expelled through the tube. Local applications of lime water were used by means of the atomizer, and occasionally solutions of nitrate of silver and carbolic acid were substituted. The exudations became so abundant that they now had to be removed by introducing goose feathers trimmed to fit the size of tube. They were passed down the windpipe, quickly turned and drawn out, frequently bringing great quantities of membranes with them.

Upon Friday night, the 6th, the weather became very cold and disagreeable, occasioning great trouble in keeping the room at the proper temperature. The patient's condition changed considerably for the worse during the night, and by 10 o'clock next morning the expulsion of membranes became more difficult, and was frequently harrassed by cough and dyspnœa. He gradually grew worse, and very little hope was now entertained for his recovery. By 2 o'clock we had lost all hope, expecting him to die every moment, but the feathers wet in lime water were continued, until finally a large quantity of membrane was removed with perfect relief to his distressing symptoms. He now re-acted, but relapsed again during the night of the 8th, when the tube was removed. Every one who saw him now expected

him to die every moment; but as before, the feathers were introduced as far as the bifurcation of the trachea into the two bronchi. He re-acted again, and from that night his condition improved. Portions of membranes an inch or more long were removed.

Placed in lime water they were readily dissolved. Whenever the respirations were labored, a few drops of lime water were applied into the opening, which loosened the exudation and was readily coughed up. The wound was kept open by frequently dilating the parts with the blades of the forceps until the end of three weeks, when nature was left to take its course. The wound was entirely healed by the end of the sixth week, and the patient discharged. At the present time he looks as well as before his illness, and no unpleasant consequenees are left behind in breathing or as to the voice.

The case was seen at various times by other physicians, to whom I am deeply indebted for many suggestions—especially to Dr. A. T. Heenley, who was with me throughout, and who probably deserves a great share of the credit in its successful termination.

A Case of Post-Partum Hæmorrhage Treated by Hyatt's Method. By T. A. Woodley, M. D., Kinston, N. C.

I was called on the night of October 20th, 1877, to visit Mrs. M. T., æt. 22 years, in labor with her first child. I arrived at 2 o'clock A. M., and was informed that she had been in labor since 4 o'clock of yesterday afternoon. At the time of my arrival the bag of waters had been ruptured, and the pains were recurring every twenty or thirty minutes. I made a digital examination, and found the head presenting left occipito anterior; os fully dilated, and the congugate diameter less than four inches. I waited until morning, entertaining the vain hope that nature would be sufficient to effect a delivery. I applied forceps, and after continued and repeated efforts was unable to effect delivery, owing to the large size of the child's head and smallness of the superior strait.

Finding it necessary to resort to craniotomy, and not having the necessary instruments with me. I sent for Dr. Hyatt to assist me. He came about 2½ o'clock on the 21st, and after examining the patient agreed with me as to the expediency of the proposed operation. In a short time we succeeded in delivering the head, allowing the body of the child to remain in the uterus and vagina. We were apprehensive of uterine inertia and post partum hæmorrhage; but we hoped that by waiting we would

give the uterus sufficient time to regain power and remain contracted after it was emptied of its contents. After waiting about half an hour, we delivered the body of the child, and found the placenta attached to the fundus of the uterus, and hæmorrhage began to flow profusely. While I was delivering the placenta, Dr. H. gave the patient a dose of fluid extract of ergot.

The flooding continuing after the removal of the placenta and blood clots, Dr. Hyatt handed me a rubber bag, which I passed into the cavity of the uterus. After its introduction, I distended it with cold water by means of a Davidson syringe. I used about a pint and a half of water, which was sufficient to arrest the hæmorrhage completely. The bag adapted itself to the open ends of the bleeding vessels and completely sealed them. While I held the bag in the uterus, Dr. Hyatt kneaded the uterus through the abdominal walls. In a few minutes, contraction of the organ came on and expelled the bag. There was no further trouble, and up to the present time the patient's convalescence has been in every way normal.

This method of arresting post-partum hæmorrhage is certainly the speediest, safest and most effectual to which I have ever resorted. During the last twenty years, I have seen a number of cases of this alarming accident, and have used all the usual remedies recommended; but the method of treatment adopted in the case just reported, gives the best result of any known to me. I would suggest to those engaged in the practice of obstetrics to always be equipped with a number of rubber bags (Barnes' dilators will do) and a Davidson syringe. Then the doctor need not fear any case of post-partum hæmorrhage which may be due to uterine inertia.

[Plugging the uterus with sponges, pig's bladders, Gariel's air pessaries, etc., has been resorted to for a long time to prevent uterine hæmorrhage. "Paul of Ægina placed a sponge soaked in vinegar in the uterus. * * * * Rougout (1810) advised the introduction of a sheep's or pig's bladder in the uterus and then distending it. Diday (1850) used a vulcanized caoutchouc bladder in this way."—Barnes' *Obstetric Operations*, pp. 448.) All these methods, however, depend upon the principle of the tampon; but such practice for post partum hæmorrhage has never been endorsed by the profession, and seems to have attracted little attention. But the principle that Dr. Hyatt claims priority for is, not damming up the blood into the uterine cavity, but that of *elastic pressure* applied to the mouths of the bleeding vessels—just as pressure is usually applied to the open mouths

of the divided vessel on the surface of the body. The India rubber bag is used simply because nothing else will give this elastic pressure. Even should the uterus be very flaccid, the bag can be distended to such an extent that it will fill the entire cavity. It is impossible for the uterus to be distended by this bag to a greater size than it was previous to the onset of labor; but the organ can be distended to such a size with the greatest safety, should so much distension be required before a sufficient amount of elastic pressure is brought to bear upon the open mouths of the bleeding vessels to seal them and thus check the hæmorrhage.

The difference between Dr. Hyatt's method and others will thus be seen. And unlike former recommendations as to tamponing, etc., Dr. Hyatt's method is simple, easy of application and safe. The number of cases which have now been treated by his method robs post-partum hæmorrhage of its dread, and makes us masters of the situation. The Editor adds this note under the impression that many who have heard of "Hyatt's method" have not properly understood the principle upon which it is based.]

Case of Transverse Presentation. By Z. B. HERNDON, M. D., Richmond, Va.

On the evening of 30th December, 1877, I was called to see Mrs. B. (æt. 19 years), who had been in labor the night previous and during the day with her first child. She was attended by an old woman, who, at the time of my arrival, was in utter ignorance of the difficulties to be overcome. No satisfactory statement was made as to when the waters passed; uterine contraction had ceased, and the patient complained of exhaustion and begged to be let alone.

Upon examination, the placenta was found to the left, partly obstructing the os, which was occupied by the prolapsed funis and the left arm. The head was to the right, and the abdomen looked towards the left side of the mother. The left arm was, therefore, uppermost; and as it was the first case I had seen in which the lower arm did not present, I had some difficulty in making an accurate diagnosis. After returning the arm and cord, I attempted, first, cephalic, and then podalic version; but failed in both efforts.

The fœtus was immovable, and being dead, I introduced the handle of Hodge's forceps into the popliteal space, and guarding the point with the left index finger, after great exertion, brought down the left leg, to which the clove-hitch was attached. With

this advantage, and the kind assistance of Dr. Massie, who administered chloroform, and performed the necessary external manipulations, I succeeded in turning. At this stage, ergot was given. A few expulsive pains resulted in delivery, with no other assistance than that of introducing the finger into the mouth, so as to properly direct the head in its passage. No hæmorrhage of consequence occurred, and after two or three visits, the patient was dismissed.

Correspondence.

Guarana in Sick Headache.

Mr. Editor,—I wish to call attention to the value of guarana (paulinia sorbilis) as a remedy for that very distressing complaint, sick headache. I have been a sufferer from this affection for years, and of the various remedies that I have tried, time and again, for my own relief, and have prescribed for the relief of others, have found them all worthless when compared with guarana. Whenever I feel an attack coming on, as those who are subject to this headache can readily tell, all of its symptoms are at once dissipated by a teaspoonful of the fluid extract of guarana; and when I have been suffering severely, a teaspoonful, repeated in one hour, will generally afford prompt relief.

It has also been recommended in other diseases, viz.: irritations of the gastric and intestinal mucous membranes, and in irritations of the urinary passages; but I have never used it in any of these affections.

I make use of the fluid extract prepared by Parke Davis & Co., Detroit, Michigan.

Very respectfully,

C. H. Harris, M. D.

Buckingham Co., Va., Jan. 30, 1878.

The Oxyuris Vermicularis, or seat-worm, may be readily dislodged from its favorite habitat in the rectum by the injection of two to three ounces of ol. morrhuæ, repeated once or twice.

Original Translations.

Translations from the French and German. By WILLIAM C. DABNEY, M. D., Charlottesville, Va.

Tannin in a Case of Very Intractable Vomiting During Pregnancy.—Diboué reports a case of this kind in the *Archives de Toxicologie* for September, 1877. The patient was a young woman, about 22 years of age, whose constitution was not very strong, but who had never had any serious sickness. The vomiting commenced very early in her pregnancy, but only became alarming after two months. All the usual means—such as iced drinks, alcoholic liquors, champaigne, bitters of various kinds, antispasmodics, tonics, opiates, bromide of potassium, chloral, belladonna, &c.—were tried without benefit. Before resorting to the induction of abortion, it was determined to try tannin, which was given in the form of a pill, and in the dose of 1½ grains morning and evening. Two hours after taking the first pill, the patient was able to take a little soup, and this she did again in the evening. The vomiting was not entirely relieved, but was lessened to such a degree that the nourishment could be taken and retained in sufficient quantity. An intense headache, which had lasted for some weeks, also disappeared in a few days, and strength was rapidly regained.

Intestinal Occlusion—Gastrotomy.—M. Cazin read a paper on this subject before the Académie de Médicine on the 11th of December last, of which an abstract is given in *Le Progrès Médical* for December 15th.

M. Cazin reports a case which terminated favorably, and comes to the following conclusions with respect to the operation of gastrotomy.

1. Gastrotomy is an operation applicable to certain cases of internal strangulation, such as those caused by bands, twists of the intestines and invaginations.

2. It is not necessary to know the exact seat of the occlusion in order to justify operative interference.

3. The longer the operation is delayed, the slighter the prospects of success.

4. As to the proper point at which the incision should be made, if there is any doubt as to the seat of the trouble, the incision should be made in the median line, and its extent should be in proportion to the difficulty of finding the seat of occlusion. If, however, the exact locality of the trouble is known, the in-

cision should be made there, and need be only of very small extent.

5. In searching for the point of strangulation, the various causes should be kept constantly in mind, and the method of Parise should be adopted, which greatly simplifies the operation.

6. During the whole operation, extreme care should be taken not to injure the intestines, and the precautions usual in ovariotomy should be observed.

7. Lister's antiseptic method should be adopted, which is not only antiseptic, but antiphlogistic also.

8. Unless for some special reasons, the patient should be allowed complete repose afterwards, and the bowels should not be disturbed by purgatives or injections.

The Parasitic Origin of the Diarrhœa of Cochin, China.—M. Dounon, the physician of the port of Paris, read a paper on this subject before the "Société de Médicine Publiquè et de Hygiene Professionelle," on the 26th of December last, in which he stated that the sole cause of the diarrhœa to which Europeans visiting Cochin, China, are liable, was to be found in the little parasites which attach themselves to the intestinal walls. The food, fruits, but especially the drinking water, are the vehicles by which the little entozoa gain access to the intestines.

The principal rivers of the country (Mé-Kong, Donnaï and Vaïco) overflow their banks during the wet season, and transform the neighboring country into a sort of sea. When they return to their banks, the eggs, &c., are carried with them, and thus the water becomes contaminated. That the nations of the country are comparatively free from the disease, is due to the fact that they usually drink tea, and the water is boiled in making this beverage. The Europeans, on the contrary, drink the water either in its natural state, or after being very imperfectly filtered. The usual length of time before the disease appears in a healthy person is about eighteen months; but it comes on much earlier in those who are anæmic or enfeebled by disease. M. Dounon states that he has obtained excellent results from the use of chlorodyne in the treatment of chronic diarrhœa.

M. Leroy de Mericourt stated that the minister of the marine service intended to make tea the habitual drink of sailors in this colony.

M. Napias reported an epidemic which occured in Gaudeloupe in 1866, which seemed to substantiate the views of M. Dounon, it being traced to the use of the water of the Rivière-aux-Herbes.

Hypodermic Injections of Ether for the Convulsions of a Teething Infant.—In *La Tribune Médicale* for January 6th, 1878,

is a paper by Dr. Gellé on this subject. After referring to this mode of administering medicines of various kinds, he details the following case:

An infant, aged seven and a half months, who was just cutting the lower incisor teeth, began suffering with frequent and obstinate vomiting, diarrhœa, and subsequently convulsions. During the intervals when the child was not convulsed, it was comatose, and hence it was impossible to administer remedies by the mouth, even if the vomiting had permitted it. There was high fever, and pressure on the abdomen evidently caused pain. The face was pale, and wore an expression of suffering. The pulse was quick and respiration labored. There was evidently a subacute "catorrhal state." The convulsions were caused by the general trouble of the organism. There was also a slight pneumonia which was just developing. The chief indication was first to arrest the vomiting and convulsions; in the second place, to reduce the temperature by bringing on free perspiration; and finally, to lessen, as far as possible, the pulmonary trouble.

Ten drops of sulphuric ether were injected slowly in each thigh of the little patient, who seemed to feel the prick of the needles, though it paid but little attention to it.

The convulsions did not appear again after the injection—at least the only two which occurred (ten hours after) were so slight as scarcely to deserve the name. The vomiting ceased entirely and the little patient fell asleep.

A slight pneumonia of the apex of the right lung occurred, which was followed by an obstinate bronchitis; but after some time, the child's health was entirely re-established. No local trouble occurred at the points of injection.

Physiological Means of Preventing the Presentation of the Shoulder.—M. Pinard (*La Tribune Médicale*, Jan. 13th, 1878), after calling attention briefly to the danger, both to mother and child, in shoulder presentations, states that for some years past, he has been endeavoring to determine the cause of such faulty presentations, with a view of preventing them. He claims that the cause lies in the too great laxity of the abdominal walls; and in proof of this, he calls attention to the fact that shoulder presentations are seven times more frequent in multiparæ than in primiparæ. The cause does not reside in an original malformation of the uterus. If this be true, he continues, by giving to a woman, whose abdominal walls are too lax, a band to wear during the latter months of pregnancy, the abnormal presentation of the child will be prevented. He states that in more than twenty cases, when shoulder presentations were recognized before labor set in, the mal-presentation has been rectified by the band, so as

to cause the vertex to present. In only two cases where this means was resorted to, did it fail, and then version had to be practised. In conclusion, he says that in every case when the head is not in the pelvic excavation during the last month of pregnancy, every means should be adopted to bring it there.

[Barnes (*Obstetric Operations*, pp. 95–99), when speaking of the results of a "pendulous abdomen," does not allude to the view expressed here by Pinard; nor does Leishman lay stress on this point, though, in speaking of the causes of shoulder presentations, he mentions "uterine obliquity" as one.—W. C. D.]

The Diagnostic Value of Epithelium in the Sputa.—Dr. Heitler read a paper on this subject at the meeting of the "K. K. Gesellschaft der Aerzte," in Vienna, on the 26th of October last. The following abstract is taken from the *Rundschau*, for December, 1877.

Buhl is of the opinion that, not only acute miliary tuberculosis, but also a caseous pneumonia can be diagnosed by a microscopic examination of the sputa before there is the smallest evidence of any change on auscultation and percussion. A very similar view was expressed so long ago as 1872, by Paul Niemeyer, Rühle and Amburger. They held, at least, that the presence of a large amount of alveolar epithelium in the sputa was a sign of diagnostic value in phthisis.

Fischl, on the other hand, after investigations made with great accuracy and care, comes to the conclusion that we have not yet arrived at a point where the sputa of a phthisical patient can be differentiated from that of one suffering from simple catarrh.

Heitler has recently made a very careful investigation of the epithelium in the sputa of different patients, and comes to the same conclusion with Fischl. He is very positive in the statement that exactly similar epithelial cells may be found in the sputa of patients suffering from simple bronchitis, which is located in the smaller tubes, and from the sputa of a patient suffering from genuine phthisis. Indeed, he goes farther than this, and states that the epithelium brought up by phthisical patients does not come from the alveoli of the lungs, but from the smaller bronchial tubes which are affected in these cases.

Muscular Atrophy and Muscular Hypertrophy in the Same Person.—Prof. V. Bamberger reported a case of this kind to the "K. K. Gesellschaft der Aerzte," on the 26th of October last. He stated that a number of such cases had been observed recently, and that there was an evident connection between the two processes. Indeed, the difference between them is more apparent than real, for in both there is an atrophy of the muscular tissue. The difference is simply this: That in the so-called mus-

cular hypertrophy, the atrophy of the muscular tissue itself is compensated for by a development of fat and connective tissue, which does not take place in the common muscular atrophy, except to a very limited extent. It is not very rare, however, to find a moderate amount of fat developed in true muscular atrophy. In Prof. Bamberger's patient, who was a boy, fourteen years of age, the muscles of the breast and those around the shoulder were atrophied, especially the pectorales on both sides, and the serrati antici, which gave rise to the characteristic appearances of paralyses of the serrati muscles. Certain muscles of the upper extremities were decidedly thickened, especially the deltoids, and the extensors of the hand. The muscles of the lower extremities were enormously enlarged, especially those of the calf. The function of these muscles was greatly injured, and the patient could neither stand nor walk. The movements of the arms were also greatly interfered with. The feeling of the muscles was different at different points. At some points they were softer; at others harder than normal—depending on whether the new formation was fat or connective tissue. The vertebral column was bent in its lower part; the patient's skin had a marbled appearance, and was rather colder than normal, but in other respects, it was perfectly natural. The electric irritability was much diminished in both the atrophied and hypertrophied muscles, and to both the constant and interrupted currents. There was a considerable "development" of fat about the face. The disease appeared during the early years of life, and the paralyses of the lower extremities were quite noticeable when the patient was five years old. There was no history of an hereditary tendency to such an affection.

Beneficial Action of Pilocarpin in a Case of Œdema, &c., due to Emphysema and Degeneration of the Heart.—Dr. Edward Kurtz (*Memorabilien*, 11 Heft. 1877), reports a case of œdema of the limbs due to emphysema and "degeneration of the heart," in which he employed the extract of jaborandi with excellent results. The œdema affected both the upper and lower limbs. There was considerable emphysema and bronchial catarrh, and the heart's tone was muffled and its action irregular. The arteries were atheromatous. Digitalis and other remedies were tried without avail. The condition of the patient was most distressing, especially on account of the dyspnœa. At this time a syringe full of a two per cent. solution of pilocarpin was injected under the skin. In ten minutes, the medicine began to exercise its specific effects. The sweating was not very great, though the skin was moist and soft; but the salivation was very considerable. The saliva was mixed with the bronchial secretion which had previously been discharged in small quantity. In two

hours, the patient expectorated a large bowl full of fluid; but after that time the salivation was less intense. At the same time there was a considerable diminution in the œdema, and the dyspnœa was greatly relieved.

There was no giddiness or headache produced, nor was there any feeling of faintness caused. The secretion of urine was not much increased, but there was a considerable flow of tears. The remedy was used at intervals for some days, always with the same result. The œdema was greatly diminished, the breathing became much easier, and the patient felt far more comfortable. The remedy seemed also to exercise a very favorable action on the bronchial catarrh.

Treatment of Chronic Tobacco Poisoning.—Dr. Dornblüth (*Sammlung Klin. Vorträge, Von R. Volkman*, No. 122, *and Allg. Weiner. Med. Zeitung*, January 8th, 1878) after describing the symptoms of poisoning by tobacco, recommended the following treatment:

In the first place, of course, the cause should be removed, either by entirely stopping the use of tobacco, or using it in some less injurious form. As a general rule, the patient can continue the moderate use of the agent in some mild form without injury. "Swallowing" the smoke is always to be prohibited, and also the use of cigarettes, which are especially injurious. Smoking cigars without the use of a cigar-holder, or using a pipe with a short stem, is also to be prohibited. Long pipe stems and cigar holders will be very useful in preventing a relapse.

In acute poisoning, when the nicotine has become mixed with the saliva, and passed into the stomach, pure tannin should be used as an antidote. This agent forms an insoluble compound with nicotine. Should severe pain come on, simulating angina pectoris or colic, morphia is to be used hypodermically. This has been found very serviceable by Oppolzer in a case of acute poisoning, caused by the patient going to sleep with a cigar in his mouth. The symptoms in Oppolzer's case were complete loss of consciousness, blueness of the lips, &c. In the chronic form of poisoning, iodide of potassium is to be used as recommended by Siebert. The cold water cure is especially useful in cases when the symptoms of chronic spinal irritation are present. In tobacco amaurosis, which is not accompanied by any changes in the back-ground of the eye, the disuse of tobacco and the administration of strychnia will generally bring about a complete cure.*

*The reported cures of "tobacco amaurosis," in many of the journals, several years ago, induced the Editor to resort to the use of strychnia—by mouth and hypodermically—to overcome the nervousness and muscular trembling occasioned by excessive smoking. The results have thus far in several cases proved beneficial.

When it is impossible to prevail on the patient to give up the use of tobacco entirely, he should be cautioned to use a mild article, and a pipe in place of cigars. Ginger* will frequently be found of service in enabling a patient to break off from the use of tobacco.

In the cases of poisoning brought on by working in tobacco, if thorough ventilation of the room does not cause relief, the occupation should be abandoned.

Translations from the Spanish, etc. By CHARLES R. CULLEN, M. D., Hanover county, (Postoffice, Richmond), Va.

Goitre.—An article in The *Medical and Surgical Journal* of Buenos Ayres† concludes that drinking snow water, and living in snow regions, are not the causes of goitre, but that the disease has chiefly a hereditary causation due to constant inter-marriage; and that the cure for the coming race is immigration of healthy subjects. But, unfortunately for this view of the author, while inter-marriage may be the one principal cause, mention is made of several places where locality seems to be, in accordance with an almost universal belief, the primary cause of goitre. In the city of Mendosa, 777 millimetres above the level of the sea, there is a population of 8,124. Of this population, 312 persons are reported as the subjects of goitre in one place, and 1,540 in another place, of which 1,500 there are 232 idiots. Several other cities or towns are mentioned where there are many cases of goitre, which facts would seem to argue very strongly against the views of the writer, and in favor of the old belief that high elevation is one of the chief causes of this condition.

Aneurisms Treated by Electricity.—A writer in another number of the same journal reports cures of 40 cases out of 60 cases of aneurisms treated by electricity.

Neuralgia of the Abdomen.—In the Madrid *Medical and Surgical Journal*, is the report of the case of a man, aged 24 years, who had suffered from extreme youth—the disease gradually increas-

*Chewing some of the bitter tonic roots, etc., has also been recommended. For some time past, in this city, a "tobacco antidote" or cure has been popular. The essential of this "antidote" is said to be gentian. A number of parties who have used it affirm that frequently taking a pinch or so of the powder into the mouth, and swallowing the juices thus produced by the saliva, has taken away their desire for tobacco.—*Note by Editor.*

†This is a semi-monthly journal, of 24 pages, published at Buenos Ayres, the capital of the Argentine Republic, South America. Subscription price, $10 per annum, paid in gold or silver; but $220 in *current* money, showing the depreciation of the national currency, because of the late war with Brazil.—*Translator.*

ing until the abdominal muscles were violently contracted. This was attended by great pain and vomiting. The attacks sometimes lasted a week, with slight intermissions. The patient had travelled through Spain, to Berne, in Switzerland, and Paris, vainly seeking relief at the hands of different medical men. At last a Dr. Mender treated him with douches of cold water and arsenic and mineral waters. The neuralgia gradually yielded, and for the past five years the patient has been well.

Proceedings of Societies.

RICHMOND ACADEMY OF MEDICINE.

September 18th, 1877. **Cases of Tetanus.**—Dr. Thomas R. Evans reported the case of a negro, aged about 25 years, at the City Hospital, who had received an injury of the great toe. He was about to be discharged as cured when tetanoid symptoms set in. Three fluid ounces in all of the fluid extract of physostigma venenosum were administered hypodermically, and a quantity of chloral hydrate was also used hypodermically during the progress of the case. Both of these remedies produced a state of great sedation for twenty-eight days, and caused sufficient relaxation to allow of his being regularly fed. But he died from the effects of the tetanus on the 28th day. Tetanoid symptoms continued throughout the case.

Dr. Watkins reported a case of traumatic tetanus which he cured by the application to the wounded parts of a freezing mixture composed of ice and salt.

Dr. M. L. James reported a case of traumatic tetanus which was cured after the internal use of fluid extract of calabar bean, chloroform, chloral and morphine.

October 18. **Phytolacca Decandra for Mammitis.**—Dr. H. H. Levy reported a case in which all the earlier symptoms of mammitis had developed. The woman had a chill, followed by fever, tumefaction of one of the breasts, etc. After the administration of fluid extract of poke-root in ordinary doses, and the local application of an ointment composed of belladonna, potassium iodide and glycerine, the patient was cured. She complained of some dizziness.

December 18th. **Election of Officers.**—Dr. O. A. Crenshaw, President; Dr. Charles S. Brittan, Secretary.

January 3d, 1878. **Albuminuria Successfully Treated by Skimmed Milk.**—Dr. O. A. Crenshaw sometime ago had been called to see an Irish woman, about 40 years old, of slender

build, and anæmic appearance. She had œdematous swelling of the vulva and lower extremities, and complained of pain in the small of the back. Other symptoms led him to examine the urine. Tested by heat and nitric acid, the test-tube seemed as if filled by a mass of albumen. He commenced treatment with a purgative, and then gave iron and diuretics. As diuretics, he used chiefly watermelon seed tea and cream of tartar. But the œdema continued to increase, and although special attention was directed to giving a nourishing diet, she became more and more emaciated and delicate. He then commenced with the "skimmed milk treatment," using as much as five pints daily. Soon after beginning this treatment, copious vomiting and involuntary watery alvine discharges set in, which could not be stopped—fortunately, as the sequel will prove; but these discharges were alarming in their frequency and copiousness, although the general health did not seem to suffer materially, if at all, from them. The size of the woman, as to the œdema, rapidly diminished. The suddenness and profuseness of these discharges reminded him very much of a cask of water when the bung was knocked out. Along with the "skimmed milk treatment," he had used gin, cream of tartar and bitter wine of iron. The patient entirely recovered, and has never had a relapse.

Jaborandi for Scarlatinal Dropsy.—Dr. H. H. Levy reported the case of a white boy, aged 6 years, who recently had scarlet fever of moderate severity. The disease progressed naturally until the third week, when dropsy set in. Diuretics were given, and the anasarca, judging by the amount of swelling, was held in check, if it was not subsiding. The doctor failed to make one of his daily visits. But when he called on the patient the succeeding day, he found him terribly puffed, complaining of feeling cold, and his stomach was irritable. He had passed no urine for fourteen hours, but the bladder was not distended. The pupils were widely dilated and immovable. Dry-cupping over the kidneys was resorted to, but with poor success. A blister, 5x8 inches, was then applied over the same region, and the patient was ordered to have by enema every four hours one fluid drachm of fluid extract of jaborandi in one fluid ounce of thin starch. Six hours after the enema, the skin was very moist, and the blister had drawn well; but he had not yet passed any urine, and the conjunctivæ were much injected, and he was delirious. The pupils were still dilated, but had become slightly sensitive to light. Due to some confusion, only one enema of the fluid extract of jaborandi had been given, but the enema was now repeated. Hot poultices were also applied over the

blistered surface. An hour or two later, the patient had, in quick succession, five convulsions, and shortly thereafter commenced to pass urine freely. During the night, the skin, kidneys and salivary glands acted well; and in the morning, the boy was conscious and in pretty good spirits; the conjunctivæ were free of congestion, but he was still sightless. The stomach being irritable, milk and gin were given by enema, as also enema every four hours of half drachm fluid extract of jaborandi, until six fluid drachms in all had been given. In two days more, the skin and kidneys having acted well, sight was perfectly restored, and the œdematous swelling was greatly reduced. The stomach was no longer irritable, and nutritious food, gin, tincture of muriate of iron, and bitartrate of potash constituted the treatment until he was soon completely relieved.

Analyses, Selections, &c.

Battey's Operation—Its History—Cases—Remarks.—Dr. J. Marion Sims has been making some "remarks" on this operation in successive numbers of the *British Medical Journal*, Dec. 8, 15, 22 and 29, 1877, which are of striking interest and importance at this time. In his introductory, he says that Dr. Edward J. Tilt first called special attention to ovaritis, pointing out its influence on the general health, and laid down rules for its treatment. But notwithstanding the additions he made to our knowledge on this subject, we constantly see cases of ovaritis, so called, which baffle our best efforts, and are hopelessly incurable. Sometimes continued ovarian pain and exacerbations of suffering occur at the menstrual epoch that are almost unbearable. Now and then, this ovarian trouble produces such violent disturbance of the vascular and nervous systems, that life is jeopardized. Occasionally it terminates in epilepsy or insanity, and ultimately in death.

To Dr. Robert Battey, of Rome, Ga. [whose engraving, with a biographical sketch, will be presented in the April number of the *Medical Monthly*], we are indebted for the light we have on the serious consequences of what he terms an "unrelieved menstrual molimen." In 1872, he first pointed out the complications and dangers of this condition, and demonstrated a method for it, when otherwise incurable. His investigations were pursued according to the inductive method, and his conclusions were arrived at by the careful study of a single case.

In 1865, Dr. Battey had the case of an unmarried lady, æt. 21 years, who had complete amenorrhœa, due to absence of

uterus. Each monthly effort was attended with such agony, and vascular and nervous excitement, that she was worn out by suffering, and eventually died of mere nervous exhaustion—from the immediate effects of an unrelieved menstrual molimen.

Some time after this, he saw another unmarried lady, aged 30, who had been a confirmed invalid for sixteen years. She had complete amenorrhœa, having had her menses but twice during all this time. Yet the menstrual molimen was very severe, accompanied by headache, suffused face, and often with epileptiform convulsions that left her in a comatose condition. Along with these symptoms, she had repeated attacks of pulmonary congestion, followed by protracted cough. Ordinarily these attacks were measurably relieved by vicarious hæmorrhages. She had repeatedly had pelvic cellulitis, terminating in abscesses, and occasionally in hæmatocele. During six years of treatment, Dr. Battey exhausted all the usual resources without benefit. Seeing that she must soon die unless the monthly molimen was arrested, he determined to remove the ovaries, and thus bring about change of life. He wrote to many gynæcologists, stating his views, but received no encouragement. Hence he was obliged to perform the operation entirely upon his own responsibility.

In August, 1872, he extirpated both ovaries by the abdominal section. The pedicles were tied with silk ligatures, cut short and dropped into the peritoneal cavity. Each ovary presented a recently ruptured Graafian vesicle. The progress of the case was slow. Septicæmia supervened, but was successfully combated with intra-peritoneal antiseptic injections after the manner of [the late lamented] Peaslee. All the nervous phenomena, the convulsions and cough, the pelvic inflammations, abscesses, hæmatoceles, etc., disappeared, and she rapidly gained flesh and strength, and she is now in good health.

Dr. Battey has now performed the operation twelve times—twice by abdominal section, and ten times by the vaginal section. He prefers the latter method* for the following reasons:

1. The tissues cut through are thinner and less important.

*Since Dr. Battey's last publication on this subject, it would seem that his views have undergone a change on this point, as the result of later experience. In a private letter to Dr. Sims (October, 1877), he says: "Three of my cases have been unsuccessful, because of imperfect removal of the ovaries. In every case where both ovaries have been cleanly removed (and the patient recovered), the change of life has taken place, and the maladies operated for have disappeared. *The ovaries are more easily removed by the abdominal section.* In three cases it required more skill than mine to effect clean removal by the vagina. *When we cannot be assured of success by the vaginal route, we should elect the abdominal.*" (Italics in both sentences ours). It is not, therefore, supposed that these "reasons" in favor of the vaginal route would now be urged by the distinguished author of the operation.—*Editor.*

2. With judicious management, air need not, and generally is not, admitted into the abdominal cavity.

3. A peritonitis set up in the pelvic membrane is much less likely to become general, and is much less grave in its consequences.

4. Drainage of serum from the *cul-de-sac* is prompt and continuous.

5. With care, there is no interference with the intestines.

6. With properly educated touch, the ovaries are reached with greater facility, and they are brought into view with less strain upon the broad ligaments.

7. These combined advantages render the vaginal method less dangerous to life.

A brief synopsis of Dr. Battey's cases are next given. As his first case has already been noted, Dr. Sims begins with Dr. Battey's second case, and gives the remainder *seriatim*.

Case II, age 35, married; one child 5 years old. Bad health since its birth. Persistent neuralgia of left ovary, which was somewhat enlarged. Pain aggravated by touch. All treatment unavailing. Vaginal incision 1873; pedicle tied, the ligature hanging from vagina. Pathology, cystic degeneration of ovary. Recovery rapid, and great relief for a time. But soon the right ovary began to enlarge and was as painful as the left formerly was. This ovary is to be also removed.

Case III, age 38, married; three children, youngest 9 years old. Invalid since this last labor—endometritis, and continuous ovaralgia. Insanity threatened. Removed both ovaries, 1874, by vaginal section, with *écraseur*; applied no ligature nor suture. Recovery rapid. Cure perfect and permanent.

Case IV, age 24; married two years; bedridden two years. Had excessive ovaralgia, aggravated by menstruation or exertion. Took morphine largely to relieve pain. Left ovary removed May, 1875, by vaginal incision. Ovary was bound down by adhesions, which were broken with finger nail and removed piecemeal. Recovery tedious. Somewhat relieved, but still suffered so much that the other ovary was to be removed. Result, not improved.

Case V, age 35, married, sterile; bedridden for many years; had dysmenorrhœa. Ovaralgia unceasing. Right ovary very tender on pressure. Coccygodinia also. Right ovary removed May, 1875, by vaginal incision; pedicle ligated. Recovery from operation rapid, although followed by pelvic inflammation. Improvement slight. Left ovary became painful, which is to be removed. (See Case IX).

Case VI, age 30, married; four children. Invalid since last

labor. Ovarian dysmenorrhœa and ovaralgia for eight years; subject of morphinism. Mind unbalanced; threatening insanity. Both ovaries removed, 1875, by vaginal incision. Pedicles ligated; ligatures brought out by vagina. Peritonitis developed on ninth day, and died in 24 hours. Autopsy: Abscess around stump of right ligament and ligature, which, bursting into peritoneal cavity, caused peritonitis.

Case VII, age 25, single; dysmenorrhœa from 14 years of age; ovaralgia constant. Bedridden for four months. Nervous system shattered. Took morphia daily, and chloral 5j every night. Both ovaries removed, 1875, by *écraseur*. Convalescence rapid. Cure complete.

Case VIII, age 26, married; one child, 11 years old; invalid since its birth—metritis, pelvic cellulitis and pelvic abscesses. Uterus irritable, hypertrophied, fixed by effused organized lymph. Continued ovarian pains. Left ovary enlarged, and very tender on pressure. Both ovaries removed, 1875, by vaginal incision. Small hæmatocele in Douglas' *cul-de-sac* was cut through. Ovaries bound down by adhesions, and were removed with difficulty. *Écraseur* used. Ovaries not removed in entirety. Operation unsatisfactory; convalescence accompanied with pelvic inflammations and abscesses. Result, no improvement.

Case IX, age 35, married; sterile. This is Case V, whose right ovary was removed four months previously. Left ovary now removed by vaginal incision. Ovary bound down by adhesions, which were broken by finger and removed piecemeal. Operation unsatisfactory, but recovery from it rapid. Result, no improvement.

Case X, age 29, single; invalid for years from functional heart trouble. Ovarian dysmenorrhœa; pains persistent. Mind impaired. Both ovaries removed by vaginal incision, 1876. Used *écraseur*. Death on third day from peritonitis. No autopsy.

Case XI, aged 34, married; one child, stillborn, 14 years ago. Sloughing followed forceps labor, then total atresia vaginæ. Never menstruated since labor; invalid ever since. All of several operations for atresia failed. Dreadful suffering every month. Both ovaries were bound down, but removed by abdominal incision, as atresia prevented vaginal operation. Both ovaries of normal size. Recovery from operation rapid. Result, complete and permanent cure.

Case XII, age 22, married 4 years; sterile. Bad health for 8 years; dysmenorrhœa, pelvic and ovarian pains, worse in left ovary; epileptic convulsions. Vaginal incision, 1877. Both

ovaries bound down by adhesions; right partially removed; left wholly. Operation unsatisfactory. Result, not improved. Dr. B. thinks of removing the portion of right ovary by abdominal section.

Dr. Sims' seven cases are as follows:

I. Age 35, widow. Bad health a long time; dysmenorrhœa for years; menorrhagia last two years. Retroflexion, with hypertrophy of posterior uterine wall. Left ovary, English walnut in size, constantly painful and excessively tender; pain greatly aggravated during menstruation. Pessaries always increased ovarian pain. A band of undilatable gristly tissue encircled the os internum. Cervix incised, and then dilated sufficiently to permit a digital examination of uterine cavity. Hypertrophied utricular glands caused the menorrhagia. These were removed with curette; menstruation became normal, but no amelioration of ovarian neuralgia or uterine displacement. Abdominal section, February 18, 1875. Ovary, having undergone cystic degeneration, collapsed in trying to remove it. Pedicle secured in lower angle of abdominal incision, and remains of ovary were clipped off. Pelvic cellulitis followed, terminating in abscess of left broad ligament, which opened by the side of pedicle at lower edge of abdominal incision. But in a month she recovered, the uterus being held in place by the ligament, and in a few weeks the patient returned to her home in China, perfectly cured.

II. Age 40, single. Excellent health until ten years ago; then taken suddenly with dysenteric diarrhœa, thought to be of malarious origin, as it was regularly intermittent, and lasted three months. Neuralgia, in various parts resulted, followed by irritable rectum, giving pain when bowels moved. Symptoms, those of anal fissure, or of ulcer just within sphincter ani. But sufferings not relieved by repeated operations and treatment for these. Bowels became regular and easy, but the moment they were evacuated, violent pain radiated from rectum to lower extremities and abdominal viscera, which enteralgia often continued until bedtime. Usually slept soundly at night, due to exhaustion from daily pain. Daily pain not influenced by fasting or eating. She was treated by many eminent practitioners in America and Europe. After one operation in Paris for fissure of rectum, bowels were constipated for ten days, and she was easy all these days; but when the bowels were moved, pain returned with increased violence. Nearly ten years were thus spent in travel, quiet, getting doctors' opinions, and undergoing operations, but no good results. Dr. Sims examined her in March, 1875. No rectal organic disease. Uterus retroverted; fundus

hypertrophied; posterior wall along cervix and body very sensitive to pressure. Left ovary slightly enlarged and tender on pressure. Vaginismus great—gentlest touch producing intense agony. Failed to fit an instrument that would hold uterus in normal position—the narrow, short, virgin vagina being the chief obstacle; intra-uterine stem failed. In the fall of 1875, examined her again. Vaginismus had rendered all previous examinations unsatisfactory. Anæsthesia now used to relax muscles. Uterus could be easily anteverted. Left ovary twice as large as it should be. A week later, without anæsthetic, notwithstanding vaginismal pain, uterus was easily placed in proper position by repositor. The repositor still *in situ*, with finger to the left side of Douglas' *cul de sac*, when external pressure was made on abdomen towards finger in vagina, so as to compress ovary, the peculiar pain that daily followed bowel evacuations was instantaneously produced. Dr. S. rested from all temporizing, and advised Battey's operation. Performed October 25, 1875, by abdominal incision for the purpose of fastening pedicle in lower angle of external incision, and thereby curing retroversion. In dragging the left ovary (which was a conglomeration of thin cysts) through incision, it collapsed. After securing pedicle in incision, the remaining portion of ovary was excised. Recovery from operation rapid. Neither pulse nor temperature rose over 100. Bowels moved 5 days after operation, and subsequently without pain. Clamp removed on sixth day. In bed for 3 weeks, and gradually seemed to get completely well. Vaginismus entirely vanished. Soon, however, bowel pains began to recur, and vaginismus returned. On examination, adhesion between the ligament and abdominal parieties had given way, and uterus was resting on rectum. During the month that the uterus was held up, she was easy. As it is, her pain is ameliorated.

III. Age 35, single. Dysmenorrhœa for 20 years; pain in sacro-pelvic region 10 years. No treatment improved her. She was morose and tempted to suicide. Dysmenorrhœa was partly due to stenosis of cervix, but mostly to ovary. Left ovary was the centre of constant pain, which was aggravated at menstruation; was tender on pressure. Incision of cervix no way improved her. Extirpated left ovary by vaginal incision, November, 1875. Pelvic cellulitis followed, which terminated by resolution. "I made the mistake of removing but one ovary, and she was not only not benefitted, but made worse by the operation."

IV. Age 20, single; never had menstrual period without pain; indeed, pelvic pain was constant. Treatment had done no good. On examination, had anteflexion, small os tincæ, con-

tracted cervical canal, and hypertrophy of anterior uterine wall. Cervix incised and canal enlarged, but not much improved. She returned a year later worse. Cervical canal had contracted. Left ovary was seat of disease. Cervix again incised. A year later, 1875; she was still worse. Left ovary was extirpated by vaginal incision. Ovary somewhat enlarged, and had undergone cystic degeneration. Pedicle was severed with electro-cautery; hæmorrhage followed, and ligature was applied. Pelvic peritonitis and cellulitis occurred, but terminated by resolution. In bed for months. Became emaciated and opium-eater. A year later, returned a most wretched sufferer. Removal of right ovary is required.

V. Age 38, married; regular monthly, but constant great ovarian pain for eight years, aggravated during menstruation. Retroverted uterus. Posterior wall hypertrophied and painful on pressure. Left ovary somewhat enlarged, very painful on pressure, and centre of suffering. Three years under medical treatment by incision of cervix, pessaries, &c., without cure. In February, 1876, Dr. Sims saw her; she was stout and fat. Both ovaries were removed by abdominal incision, with purpose of curing retroversion; pedicles were brought out at lower angle of abdominal incision, and clamped. Both ovaries had undergone cystic degeneration, and both burst and discharged contents during effort of drawing them up to surface of abdomen. The traction on pedicles produced intense suffering. Peritonitis; death on seventh day.

VI. Age 20, single; menstruated at 14. At 15, had a severe fall, injuring spine. Dysmenorrhœa, lumbo-sacral and pelvic pain ever afterwards. Coccygodynia intense—morphia hypodermically not controlling this pain, which was constant. Never slept over an hour or so continuously. Nott's operation of extirpating coccyx did not benefit. A year later, Dr. Sims saw her. Continuous agonizing pain at end of spine; could not sit at all; could lay in bed only on left side. Photophobia marked, due to deranged nervous system. There was a longitudinal, slightly elevated, hard and gristly cicatrix, 1½ inches long, over coccygeal region, the seat of operation a year ago. Cicatrix exceedingly sensitive to touch—even of a feather; sensitiveness extended an inch above and below, and two inches to right on nates, but not on left. Skin of sensitive region was thicker and coarser than natural. In short, all symptoms led Dr. Sims to repeat operation in November, 1876, for extirpation of more of the bone, and all the sensitive tissues. Wound did not heal for three months. No improvement. Then ovaries were examined. There was vaginismus, retroflexion, and right ovary very painful.

Pressure shot the pain from the ovary to hyper-sensitive coccygeal region. Vaginal incision, April, 1877; right ovary was seized, brought down and crushed off with *écraseur*. Pelvic peritonitis and cellulitis followed, resulting in abscess, which discharged through vagina. Pyæmic symptoms developed; but recovered from operation seven weeks later, and left for home "in the most miserable condition imaginable." Both ovaries should have been excised by abdominal incision, and pedicles secured in incision.

VII. Age 38, married at 20; good health till childbirth 15 years ago. Invalid ever since. Brought to Dr. Sims, October, 1876. She was frail and anæmic. Morphia daily necessary; constant pelvic pain. Severe dysmenorrhœa for 15 years. Uterus retroflexed with hypertrophy of posterior wall, which was tender to touch. Os was exceedingly small; cervix gristly hard; canal contracted; os internum also contracted at point of flexure. Uterus was bound by adhesions to rectum. Ovaries, especially the left, very tender and sensitive. Cervix was incised. Noise made by knife in incising the gristly cervix was heard by assistants. [Where there is such a gristly degeneration of tissue in the cervix, we can never expect any permanent relief from operation.] Next menstrual period was freer and easier. But the cervix contracted, and menstruation became scanty and painful again. Ovarian pain was never relieved. Battey's operation was performed May, 1877, by vaginal section. Making the opening into the peritoneal cavity was exceedingly difficult, due to adhesions between rectum and retroverted uterus. These dense adhesions were broken by finger. Then by the uterine repositor, uterus was raised up to normal position. Uterus being held up with repositor, and pulling its anterior surface forward, almost in contact with the inner surface of pubes, Dr. Sims passed finger into peritoneal cavity, and attempted to bring down ovaries. Being bound down by bands of false membrane, ovaries could not be dislodged; nor could they be removed piecemeal, and operation was abandoned. Patient was too feeble to complete operation by abdominal section. "Being a firm believer in Lister's antiseptic method, I tried it in this instance; and to this, I attribute, in a great measure, my total failure to finish the operation: 1, because the carbolic spray corrugated the parts, and rendered them dry and unyielding; and 2, because it deadened the sensibility of my finger so that I could not distinguish one part from another." The patient recovered from the immediate effects of the operation without complication. Her pulse and temperature rose but little above normal, and only for first day after operation. Was this

due to the antiseptic spray? If the operation had been performed by abdominal section, both ovaries could have been removed entire, with the possibility of complete cure.

Analysis of Cases—Remarks.—In all of Dr. Sims' cases, the ovaries removed had undergone cystic degeneration. Their fibrous structure (stroma) was greatly altered in appearance, and, no doubt, the microscope would have shown that it had undergone marked organic change, in consequence, probably, of subacute ovaritis, which blends and amalgamates the nerve filaments, cellular tissue, and fibrous structure of the organ into a sort of neuroma In no other way can we account for the persistent neuralgic pains; they are the pains of a neuroma, and the poor sufferer almost invariably becomes a morphinist. Ordinary cystic disease of the ovaries, resulting in true ovarian tumors, never gives rise to severe pain. The peculiar pain of these cases, just reported, must, then, depend upon some radical organic change in the nerves and stroma of the ovaries, and not upon the mere development of cysts. This view of the case is further strengthened by the fact that the pain persists after imperfect removal of the ovaries, where the cysts are broken down and scraped off while a portion of fibrous structure still remains.

Dr. Battey lost two of his twelve cases: Dr. Sims lost one of his seven—all of peritonitis. In five of Battey's cases that recovered, some form of pelvic inflammation followed the operation, and recovery was slow. In the other five, there were no complications, and recoveries were rapid. In five out of the six cases of Sims that recovered, pelvic cellulitis or peritonitis followed the operation, and recovery was tedious. In six cases, Battey removed both ovaries *entire*, and sexual desire was in no way affected. In three cases, he removed but one ovary; in these, as also when the ovaries were broken down and removed piecemeal, and not in their entirety, the operation was unsatisfactory and without benefit. Of his 12 cases, 2 were *improved;* 4 *not improved;* 2 *died;* 4 *perfectly cured.* Of Sims' 7 cases, 1 *greatly improved;* 3 *made worse;* 1 *died;* 1 operation not finished; 1 permanently *cured.*

Dr. Sims advocates the operation more earnestly than ever, because he sees where mistakes were made, and how they may be avoided. Ovariotomy was once opposed because unsuccessful; but now it is accepted, because successful. "Our errors, like beacon lights to warn others against hidden dangers, should be made conspicuous. Let us, then, frankly inquire where and how we have made errors that we may profit by them in future."

Battey started out with the theory that cure would depend on bringing about "change of life" by removing both ovaries. The

experience of all ovariotomists proves that removing one ovary will not do this. But Dr. B. lost sight of his own theory in removing but one ovary, because it alone was the fixed seat of pain; in his 2d, 4th and 5th cases, and in all of these the operation was unsuccessful. In three of Dr. Sims' cases, but one ovary was removed, and the operations were utter failures

Pelvic inflammations is a common result of the operation. Hence both ovaries should be removed in their entirety, at one operation, instead of incurring the double hazard of two operations. Exceptional cases may occur, however; thus in Dr. Sims' first case, and in one operation by Dr. Sabine, only one ovary was removed, and permanent cure followed. But the rule should be to bring about "change of life" by removing both ovaries [although only one may apparently be the seat of trouble at the time of operating].

Four of Battey's vaginal operations (iv, viii, ix and xii) failed because adhesions bound down the ovaries, so that it was impossible to remove them entire. If he had operated by the abdominal incision instead, he would have removed the ovaries entire, and the results would have been beneficial. In all his failures, the ovaries were removed piecemeal, or only was taken out. In Sims' four vaginal operations, one ovary only was removed in three cases, and in the fourth case, he failed to reach the ovaries, because they were bound down by adhesions. The first three were not only not improved, but made worse. If he had operated by abdominal section in the fourth instance, he would have been able to remove both ovaries entire. Battey's first and eleventh cases were the most unpromising, but the results were most satisfactory. These were his only two abdominal sections. As the ovaries in these two cases were bound down by old inflammatory adhesions, had he operated *per vaginam*, he would have been unable to remove the ovaries entire, and the results would have been failures to cure.

The inferences drawn from this analysis are:

1. Remove both ovaries entire in every case.

2. As a rule, operate by abdominal section, because, if the ovaries are bound down by adhesions, it is possible to remove them entire; whereas by the vaginal incision, it is impossible.

3. If we are sure there has been no pelvic inflammation, no cellulitis, no hæmatocele, no adhesion of the ovaries to the neighboring parts, then the operation may be made by the vagina, but not otherwise.

4. The ovaries are more easily removed by the abdominal incision.

The following table shows the number of times this operation

has been performed, the number of deaths, and the name of each operator.

	Operations.	Deaths.
Dr. Battey, Georgia	12*	2
Professor Hegar, Freiburg	2	0
Dr. Trenholme, Montreal	2	0
Dr. Gilmore, Alabama†	1	0
Dr. Thomas, New York	2	1
Dr. Peaslee "	1	1
Dr. Sabine, "	1	0
Dr. Sims, "	7	1
	28	5

Battey's operation may be resorted to under the following conditions:

1. In cases of amenorrhœa where there is no uterus, or only the rudiments of one, or where there is an incurable atresia uteri, and the menstrual molimen produces such violent disturbances of the whole system as to destroy health and endanger life, the removal of the ovaries is the only means of permanent relief.

2. In cases of prolonged physical and mental suffering, attended with great nervous and vascular excitement, produced by perturbed menstrual molimen, whether menstruation be absent, scanty, or otherwise, this operation is justifiable after all the usual remedies fail to relieve.

3. In cases of incipient insanity and of epilepsy depending upon ovarian and uterine disease, this operation is justifiable after all other remedies have failed to cure.

4. In cases of fibroid tumors of the uterus attended with incurable hæmorrhages that endanger life, when the tumors cannot be safely enucleated and removed, this operation may be resorted to with the hope of arresting the bleeding, and the prospect of diminishing the tumors.

5. In cases of chronic pelvic cellulitis, and of recurrent hæmatocele, when the attacks are traceable to the disturbing influences of the menstrual molimen, we may have recourse to this operation as a *dernier resort*.

Prof. Hegar, of Freiburg, has performed Battey's operation twice to bring about the menopause, and thus to arrest hæmorrhage from uterine fibroids which had resisted all other treatment. In each case, bleeding ceased entirely, and the fibroids appeared to diminish.

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*Dr. Battey has performed the operation twice since these figures were compiled, thus making the total number of his operations 14 instead of 12; total deaths, 2.—*Editor.*

†Dr. Gilmore's case died of yellow fever nine months after the operation, while convalescing from a peritoneal pyæmic abscess, the result of the operation.

Dr. Trenholme, of Montreal, has performed the operation twice; once to arrest hæmorrhage from a uterine fibroid, and it proved successful.

Each had the happy thought of removing the ovaries as less dangerous than extirpation of the uterus with the fibroid. Thus a field for the operation has been opened that was hardly contemplated by the author.

The popular idea of "change of life" is the cessation of menstruation. If this is the definition, then removal of the ovaries will not always bring it about. At least twice in the practice of Dr. Battey have the menses recurred at regular intervals for months, and even for years, after removal of the ovaries. Atlee, Peaslee and Storer also give illustrations of the same thing. But is cessation of the menses actual change of life? By no means. Ovulation may go on regularly, and impregnation occur although there be no menstruation. Dr. Sims and others have seen illustrative cases. The real change of life consists in the *cessation of ovulation*—whether this be accomplished by nature at the climacteric period, or artificially by ovariotomy, or by Battey's operation, which latter was projected expressly to arrest ovulation and the attendant menstrual molimen. When both ovaries are neatly and cleanly removed, the menstrual molimen ceases. But if they be imperfectly removed, the menstrual molimen occurs as regularly as it did before the operation.

Dr. Sims thinks the name "*Battey's Operation*" is the most appropriate name for the operation. Battey originated the operation, and by the most indomitable courage, has succeeded in proving its usefulness. "Normal ovariotomy" is a misnomer, as in all cases requiring the operation, the ovaries are never normal. [It may arise, however, that the operation may be required in some such cases of uterine fibroids, etc., as those in which Prof. Hegar resorted to the operation with happy effect, when there is no disease *per se* of ovaries. In such cases, the term normal ovariotomy would not be a misnomer. But as in such instances the so-called normal ovariotomy would be performed for the purpose of bringing about "change of life," and as this result is the specific purpose of Battey's operation, it is altogether proper that the world should recognize the author; hence "Battey's operation" is the best name that can be given to all such ovariotomies as have for their purpose the "change of life."—*Editor.*]

Malaria and Struma in Their Relation to the Etiology of Skin Diseases is the title of a paper by Dr. L. P. Yandell, Jr., of Louisville, read before the American Dermatological Associa-

tion, 1877, and published in the *American Practitioner*, January, 1878. Excluding the exanthemata and parasitic diseases, he holds that in malaria (or marsh miasm) is to be found the *chief* source of *acute* skin diseases, and that to scrofula *most* of the *chronic* skin diseases may be traced, and that the most inveterate examples of either class are commonly due to a coexistence of these two causes; furthermore, that the favorable or unfavorable course even of the exanthemata, are largely influenced by the presence or absence of scrofula and malaria in the patient. In numerous instances, the pathological evidences of malarial origin of acute skin diseases are patent, and may be perceived in the pale, enlarged, flabby and teeth-indented tongue, in the anæmic or muddy complexion, and in distinct *malarial periodicity*—for we have scrofulous periodicity and periodicity in other diseases as well as in health. But prolonged malarial diseases may exist without apparent anæmia or pigmentary discoloration. The eruption, it is true, may evince no periodicity, but some organ or function will do so, and the treatment which cures the one removes the other. Furthermore, though no form of periodicity be discernible, yet the antiperiodics will cure these diseases with more certainty and promptness than any other medicines. The alkaloids of Peruvian bark and arsenic stand at the head of antiperiodic agents. Iron also is almost indispensable in malarial skin diseases as in other miasmatic troubles.

An Imperfect List of the Dermatoses which may be Developed by Malaria.—Acne simplex, acne rosacea, the erythemata, urticaria, eczema, all the forms of herpes, the acute lichens, prurigo, impetigo, miliaria rubra, ecthyma, acute pityriasis; the furunculous affections, and under this head I include boils, carbuncles, felons, malignant pustules and erysipelas; also, elephantiasis græcorum, pellagra, dermal anæsthesia, dermalgia, dermal hyperæsthesia, anidrosis, bromidrosis, hyperidrosis, chloasma.

It may require a traumatism, indiscretion in diet, extraordinary heat or cold, a sudden change of atmosphere or clothing, loss of sleep, or some such thing in addition, to call forth the eruption. The performance of natural functions, as parturition, menstruation, dentition, etc., in persons having within them latent malaria, oftentimes excites the skin eruption.

Two additional facts impress Dr. Y. as strong evidences of the correctness of his doctrine: (1) Negroes are far less subject to malarial poison than white persons, and they are remarkably exempt from most of the skin diseases just now enumerated. (2) In India, during the height of the mango season, a severe form of furuncles is prone to occur, called "mango boils," un-

der the impression that eating this fruit produces them. Now, the mango ripens during the early portion of the rainy season, at which time malaria is most rife and virulent, owing probably to the rotting of the luxuriant tropical vegetation drowned by the water. The profuse rains soon wash off this decaying material into the streams, which carry it to the sea and also cool the atmosphere, and with these results there occurs a subsidence of the malarial fevers and the mango boils.

The following diseases are due to *scrofula:* Lupus, psoriasis, ichthyosis, scleroderma.

The next following Dr. Y. believes to be due to the scrofulous diathesis: Molluscum fibrosum, chronic lichen, lentigo, veruca, albinism, scleroderma, keloid, nævus, pemphigus and pityriasis.

The following are oftenest found in the scrofulous diathesis: The more obstinate and severer forms of true acne, acne rosacea, impetigo contagiosum, herpes zoster, pemphigus, non scorbutic purpura, vitiligo, favus, and the other vegetable parasites of the skin.

In the scrofuloderma, as well as in all forms of scrofulous disease, our therapeutical measures are sometimes of little or no avail. In psoriasis, ichthyosis and lupus, however, the anti-scrofulous remedies—the constructive remedies—such as cod-liver oil, syrup of the hypophosphites, syrup of iodide of iron, malt, etc., are extremely reliable. Under this line of treatment, these diseases are curable, and under no other are they with any degree of certainty according to Dr. Y's experience.

In the discussion, which followed the reading of the paper, Dr. Heitzmann, of New York, said that a nearly similar doctrine was presented ten years ago by a Hungarian physician, Dr. Poor, but was disproved in Hebra's clinic. Not one of the fourteen members present was inclined to accept Dr. Y's views.

[We cannot agree in according to malaria, as Dr. Yandell does, so extensive an influence in the production or development of *acute* skin diseases; but the facts that the clinical experience of Dr. Poor did, ten years ago, in a different field for observation, lead him to suppose *all* acute skin diseases originated in malaria; and now that the clinical observations of Dr. Yandell lead him—without any previous knowledge of Dr. Poor's opinion—to the belief that "malaria is the *chief* source of acute skin diseases"—these facts do entitle Dr. Yandell's doctrine to an unprejudiced clinical examination of the subject.—Ed.]

Section of Sciatic Nerve for Elephantiasis Arabum.—The Philadelphia correspondent of the *Boston Medical and Surgical Journal*, January 24, 1878, states that Dr. Thomas G. Morton performed an unusual operation at the Pennsylvania Hospital, November 24th, 1877, which seems to be resulting in the relief of a case of elephantiasis arabum. A colored man, aged about

thirty-five years, had enlargement of the right lower extremity from childhood, and of late the disease had appeared in the left leg. He had been a Virginia slave, had never seen one similarly affected, and had never been to Barbadoes. Dr. Morton tied his femoral artery, December 12, 1872, but with only temporary benefit. Notes of the case were published in the *American Journal of Medical Sciences*, April, 1876, page 337.

He returned to the Pennsylvania Hospital about October 1st, entirely disabled, with his limb larger than it had been previous to ligation of the artery, and asked for amputation. Bearing in mind the trophic changes that ensue upon division of large nerve trunks, Dr. Morton decided upon section of the sciatic nerve, with a view to changing the nutrition of the part. If section proved unsuccessful, then amputation could be performed. One inch and a quarter of the sciatic nerve in the middle of the thigh was excised. Recovery was temporarily delayed by congestion of the lungs, but the wound was well when the letter was written. A noteworthy result of the operation was the small amount of paralysis. He could not move the toes, but was able slightly to flex and extend the ankle; but owing to the great thickness of the epidermis, it was impossible to tell precisely which muscles were affected. The anterior crural nerve seemed to supply the greater part of the surface of the lower extremity, as the only paralysis of sensation after the operation was on the anterior half of the dorsum of the foot, the plantar surface and heel, and a narrow strip of integument running up the posterior aspect of the leg to about the middle of the calf. The operation was followed by marked subsidence in the size of the limb, which has been continued, until at the present time it measures from five and a half to six inches less in circumference than before the operation. Gradually all the thickened, hard epidermis has separated, leaving a soft, healthy-looking surface of sound skin. The heavy folds of integument about the ankles have apparently melted away.

The record of this case is of great practical interest, as cases of the disease in this country seem to be becoming common.

Malarial Hæmaturia: Natural History and Treatment—is the title of a most excellent article in the February No., 1878, of the *New Orleans Medical and Surgical Journal*, by Prof. Joseph Jones, of New Orleans, than whom, along with Prof. Otis F. Manson, of this city, there are no closer students of malaria and no better teachers anywhere on the subject. As the season is approaching when the subject of hæmorrhagic malarial fever may prove to be one of the intensest interest to a large number of

our readers, we shall make a full synopsis of this valuable paper by Dr. Jones:

In that form of malarial fever characterized by complete jaundice, nausea, incessant vomiting of green biliary matters, and hæmorrhages from the kidneys, which has received various names, at different times, and in several countries, and which is no new disease even in the Southern States, the hæmorrhage from the kidneys is preceded by congestion of these organs, and is attended with desquamation of the excretory cells and casts of the tubuli uriniferi.

Malarial hæmaturia (hæmorrhagic malarial fever), as a general rule, occurs only in those who have suffered from repeated attacks of intermittent fever, or who have been exhausted by prolonged attacks of remittent fever; and whilst some of the symptoms, as the nausea, incessant vomiting (and in some cases, black vomit), deep jaundice, and impeded capillary circulation, resemble those of yellow fever, yet there are marked differences between the two diseases.

The presence of the albumen in the urine of *malarial hæmaturia* is attended also with colored blood corpuscles, excretory cells of the kidneys, and casts of the tubuli uriniferi, impacted oftentimes with colored blood globules. I have even detected portions of the lining membrane of the Malpighian capsules containing colored corpuscles, and deeply stained by the coloring matter of the blood.

As a general rule, in severe cases of yellow fever the tubuli uriniferi in the kidneys themselves, after death, and the casts in the urine excreted during the second stage of the disease, are loaded with yellow granular albuminoid and fibrinoid matters.

Dr. Jones here details a case to illustrate the constitution of the blood and urine, the variations of temperature, pulse and respiration, and the effects of treatment:

E., age 21, fair complexion; entered Charity Hospital, 4 P. M., November 29, 1876. Has resided in low, swampy districts, and has suffered repeated attacks of malarial fever. In July and August, had jaundice. November 28th, had a "congestive chill;" lasted two hours; followed by intense jaundice and high fever. When admitted to the Hospital he had intense jaundice; pulse 144; respirations 30; axillary temperature, 102.5°F; vomiting green fluid; restless. At 9 A. M., 30th: Pulse 132; respirations 16; temperature 98°; vomits large quantities of dark, green biliary fluid. No urine since entering Hospital. Jaundice intense, even saliva gold-color. Anæmic. Right thoracic percussion dullness below sixth rib. Epigastrium and hypochondrium tender; pressure over stomach and liver gives great

pain. Splenic percussion flatness extends to the left from border of false ribs, 6 inches; and laterally, 4½ inches. Calomel, gr. viij, quin. sulph., gr. x by mouth; and quin. sulph. gr. x by enema; sinapisms over epigastrium and kidneys. Quinia every 3 hours until 40 grains are taken; as a drink, carbonic acid ice [soda] water; diet, beef-tea, milk and lime water. By 7 P. M., kidneys resumed function; urine deep brownish red; contains blood. Patient quiet, although pulse 134 and feeble; temperature 99.5°; respirations 22.

Next day, 8 A. M., jaundice continues; bowels moved. Pulse 122; respirations 22; temperature 100°. Continue quinine, gr. iij, every 3 hours. Hypochondric and epigastric regions tender; lumbar region painful, from which region blood was drawn by cut cups, and gave relief.

Chemical and Microscopical Examination of Blood.—Serum of blood deep golden-yellow color. When the blood was dropped on white bibulous paper, the central carmine spot containing the red corpuscles was surrounded by a deep orange-colored border. Chemical analysis revealed the presence in the serum of the blood, of the coloring matters and acids of the bile. The deep golden hue of the serum was caused by the bile pigment, which imparted the golden hue to the skin and conjunctiva. Coagulum firm; separation between clot and serum perfect. The clot floated in golden-colored serum. Under a magnifying power of 420 diameters, numerous dark granular masses and pigment cells were observed in the blood. Many of the colorless corpuscles contained numerous pigment particles.

One thousand parts of serum contained: water, 902.66; solid matters, including fixed salts, 97.34; fixed saline constituents, 5.77.

One thousand parts of blood contained: water, 820.50; dried blood corpuscles, 86.47; Fibrin, 4.50; albumen and extractive matters, 88.53; fixed saline matters, 7.18.

The extractive matters of the serum contained *urea* and coloring matters and acids of the bile, and were far more abundant than in normal blood.

The colored blood corpuscles were diminished, but not so much as in various forms of chronic intermittent (malarial poisoning) of long standing, attended with greenish yellow and dark bronze hue of surface, and bloodless lips and tongue.

The moist colored blood corpuscles in this case were about 345.88 in the 1,000 parts of blood, and the liquor sanguinis 654.12. (In healthy blood, the dried globules may vary in 1,000 parts from 120.00 to 150.00; and the moist globules, from 480.00 to 600.00; and the liquor sanguinis, from 520.00 to 400.00.)

In this case the blood contained relatively a much greater proportion of liquor sanguinis, and a less number of globules, than in health. The fibrin was increased, reaching 4.50 parts per 1,000 of blood. The blood coagulated firmly, with no appearance of the dissolution of the colored blood corpuscles in the serum.

The formation of the dark pigmentary particles in the blood is not peculiar to malarial hæmaturia; probably a large proportion was derived from changes of the blood in the liver and spleen. The increment of the fibrin in the blood in this case indicates an inflammatory condition of this fluid, as well as of the kidneys.

Such results overthrow the view, that malarial hæmaturia is the result of sudden action of some potent agent upon the blood corpuscles, which causes their dissolution and escape of hæmatin through the excretory structures of the kidneys.

The establishment of the fact, that malarial hæmaturia is often if not invariably attended by an inflammatory condition, or hyper-fibrinated state of the liquor sanguinis, and structural alterations and inflammation of certain portions of the kidneys, will lead to new views as to the proper method of treatment, and will go far to sustain the practice of those physicians who employ local depletion and mercury in small and continuous doses, in this disease.

Chemical and Microscopical Examination of Urine.—Up to observation, November 30th, 9 A. M., urinary excretion almost entirely suspended, and during the preceding chill and fever, he had passed little or no urine.

Heavy deposits of casts of urinary tubes, excretory cells of kidney, blood corpuscles, and urate of ammonia and soda, giving urine muddy, brownish red color. This deposit settled very slowly, and the clear urine then presented deep brown and greenish-black color. Deposit contained blood, and stained bibulous paper red and yellow; small coagula of blood were visible. Chemical analysis revealed coloring matter and acids of the bile.

Under microscope, casts of tubuli uriniferi were stained deep orange-yellow and reddish-brown, from presence of coloring matters of blood and bile. Many of the urinary casts consisted largely of coagulated blood, fibrin, and colored corpuscles. Reaction of urine, acid.

Specific gravity 1,014.

Fifteen hundred and sixty cubic centimetres passed during twenty-four hours contained: urea, 528.52 grains; uric acid, 18.72 grains; phosphoric acid, 120.12 grains; sulphuric acid,

51.38 grains; chloride of sodium, 24.02 grains; blood, casts, and albumen, present; bile, present.

As the patient was in a state of starvation, taking little or no nourishment, we observe great increase of the urea, uric acid, and especially phosphoric acid.

Dec. 2d, 8 A. M. Intense jaundice; pulse 80; respirations 20; temperature of axilla 99°. Urine abundant, reddish orange, with heavy deposits of highly colored casts of urates. Bile and bile pigment present. Amount of blood and albumen less. Reaction acid. Sp. gr. 1,015.

Fifteen hundred and twenty c.c. of urine passed during twenty-four hours contained: urea, 585.20 grains; uric acid, 18.24 grains; phosphoric acid, 87.78 grains; sulphuric acid, 25.93 grains; chloride of sodium, 23.24 grains; blood and albumen, present; bile pigment and acids, present.

Dec. 3d, 8 o'clock A. M. Pulse 71; respiration 18; temperature of axilla 99.5°. Patient improves slowly, although deeply jaundiced and very weak. Urine deeply red; acid reaction; sp. gr. 1,017. Heavy deposits chiefly of urates of soda and ammonia, casts and cells from the tubuli uriniferi. Casts and blood globules greatly diminished; albumen small amount.

Urine passed in twenty-four hours 1,150 cubic centimetres contained: urea, 566.72 grains; uric acid, 17.25 grains; phosphoric acid, 44.57 grains; sulphuric acid, 22.81 grains; chloride of sodium, 26.56 grains; blood, casts and albumen, present in small amount; coloring matter and acids of bile present.

Eight o'clock P. M. Pulse, 72; respiration 18; temperature of axilla 98.5°.

Dec. 4th, 8 A. M. Pulse 69; respiration 19; temperature 100.5°. Patient continues to improve. Treatment has been chiefly during the day 5 grains sulphate of quinia every 3 hours, until 15 to 20 grains were taken. One or two evacuations of the bowels secured each day, by small doses of extract of rhubarb and aloes. Urine deeply colored; acid reaction; sp. gr. 1,018. Heavy deposit of urates, which disappear on heating; casts and urinary cells greatly diminished; albumen mere trace; coloring matter and acids of bile present.

Eight hundred and twenty-five cubic centimetres of urine passed during twenty-four hours contained: urea, 444.67 grains; uric acid, 6.60 grains; phosphoric acid, 26.93 grains; sulphuric acid, 17.54 grains; chloride of sodium, 31.41 grains; albumen, trace.

Seven o'clock P. M. Pulse 75; respiration 18; temperature 100° F.

Dec. 5th, 8 A. M. Pulse 67; respiration 19; temperature

100.5°. Jaundice diminishing; red color of lips more apparent; patient much better; has some appetite. Urine dark blackish green color; sp. gr. 1,018; acid reaction; heavy deposit of urates; albumen and blood corpuscles entirely disappeared; only a few light colored casts present; biliary coloring matter and acids present.

Twelve hundred and twenty cubic centimetres of urine passed during twenty-four hours contained: urea. 563.64 grains; uric acid, 6.10 grains; phosphoric acid, 32.97 grains; sulphuric acid, 26.34 grains; chloride of sodium, 27.18 grains.

Seven o'clock P. M. Pulse 72; respiration 22; temperature 100.5°.

Dec. 6th, 8 A. M. Pulse 67; respiration 19; temperature 99.25°. Complexion much clearer; no albumen, nor blood, nor casts in urine; no deposit of urates; coloring matter and bile acids present. Urine of dark, blackish green color. Patient sat up this morning for the first time, and was carried down in a chair, and presented to the medical class in the amphitheatre.

Eleven hundred and forty cubic centimetres of urine passed during twenty-four hours contained: urea, 474.01 grains; uric acid, 3.32 grains; phosphoric acid, 19.76 grains; chloride of sodium, 96.55 grains; sulphuric acid, 29.81 grains.

Seven P. M. Pulse 72; respiration 22; temperature of axilla 100.25°.

Dec. 7th, 8 A. M.	Pulse	66;	respiration	19;	temperat'e	100°F
" 8th, 8 A. M.	"	108;	"	20;	"	100
" " 7 P. M.	"	65;	"	20;	"	100
" 9th, 8 A. M.	"	70;	"	19;	"	100
" " 7 P. M.	"	79;	"	19;	"	100
" 10th, 8 A. M.	"	127;	"	23;	"	100
" " 7 P. M.	"	115;	"	20;	"	100

In this case the pulse, which was 144, respiration 34, and temperature 102.5°, were reduced after evacuation of bowels and administration of sulphate of quinia. From November 27 to December 8, pulse and respiration gradually descended to normal, and temperature oscillated between 98° and 100.5°. On December 8 and 9, patient had indigestion with vertigo and accelerated pulse, consequent upon overloaded stomach. Under quinine, iron and gentle purgatives, patient improved, jaundice disappeared, and when discharged, he was fully restored to health.

Case II.—*Malarial Hæmaturia Complicated with Pleuritis.*—Mr. H., well-built, active man, has been much exposed to malaria of the Mississippi Valley, during the building of levees. Night of May 26th, 1877, had a severe chill which lasted about four hours. In the morning, May 27th, he had a deep golden

color, and suffered intense pain in the right chest, which, upon auscultation and percussion, was due to pleuritis. Ordered blister eight by eight inches over the region of pain on the left side; also ℞—Quiniæ sulph., grs. xxx; hydrargyri subchloridi, grs. x; extract aloes, extract rhei, āā grs. x. M.—Divide into ten pills. Two pills every two hours.

The partner of this gentleman, who had been engaged in the same labors and in the same localities on the banks of the Mississippi, had been seized with double pneumonia on March 18th, and died after an illness of eight days. The disease was ushered in by a prolonged chill, and he was jaundiced shortly after the supervention of the hot stage. The pleura of the left lung and pericardium were involved. The abundant expectoration from the lungs consisted of little else than *pure blood.* I treated this case by quinine, Dover's powder, blisters and nutritious diet at regular intervals, and also a blister over the left lung. The hæmorrhage from the lungs continued unabated up to the hour of death. This patient was also jaundiced.

It is worthy of careful consideration, that two active young men, both of them engaged in the same business and upon the same locality, should have been seized with chill followed by jaundice; one with pleuro-pneumonia and hæmorrhage from the lungs; the other with pleuritis and hæmorrhage from the kidneys. This observation sustains the view, that we may regard malarial hæmaturia as the supervention of an inflammatory disease on a fever.

Upon my return at the end of ten hours, Mr. H. had passed a quantity of dark bloody urine, in which clots of blood were clearly visible. Blister had drawn well, and the serum, which flowed in great abundance, was of a golden color, and discolored the bed clothes and pillows as if yellow paint had been smeared on them. The blister appeared to relieve the congestion of the left lung and pleura, and dissipate the pleuritic pain. Bowels were freely moved; quinine continued; beef tea.

On 28th, bloody urine presented similar microscopic characteristics to those of Case E. The pulse, however, was reduced from 140 to 100, and the patient feels stronger and better. The blister continued to discharge large quantities of golden colored serum.

On 29th, urine much lighter colored, contained much less blood and comparatively small number of high colored casts.

During the past forty-eight hours, the patient has taken ninety grains of quinine, combined with small quantities of calomel, aloes and rhubarb.

On the 31st the patient was able to sit up. By attention to

the diet and to the condition of the bowels, and the daily use of one or more doses of quinine, combined with iron and rhubarb, this gentleman was entirely restored.

CASE III.—*Malarial Hæmaturia, Illustrating its Symptoms and Treatment.*—Mr. M., age 21, has been working in a malarious situation on the Mississippi river. Entered Charity Hospital November 1st, 1871, suffering with malarial intermittent, which yielded readily to quinine. Patient again went to work on the banks of the Mississippi.

The chill and fever returned, and the patient re-entered the Charity Hospital on December 26th. Had a chill at the time of entrance, and presented a pale, anæmic, sallow hue.

December 27th, 10 A. M. Clear of fever. 7 P. M., seized with a severe chill which lasted two hours, followed by fever of great intensity, which declined towards morning; at 9 A. M. (December 28th), pulse 110, temperature of axilla 101° F.

During the cold stage last night, commenced passing urine in considerable amount of a deep blood color and bloody odor, and resembled to the eye liquid blood. Heat and nitric acid produced a heavy coagulum, which was very high colored, from the presence of the coloring matter of the blood. After the removal of the coagulable constituents of the blood, the presence of urea, uric acid, sulphuric acid, phosphoric acid, and chlorides, was determined by the appropriate methods.

The microscopical characters of the urine were similar to those of the cases just detailed, namely, bright colored casts of the tubuli uriniferi, containing colored blood corpuscles variously altered, and the granular fibroid constituents of the blood, deeply discolored by the coloring matters of the blood globules; detached cells from the excretory tubes of the kidneys, and yellow granular matter, and blood globules variously altered in shape. The number of colored blood corpuscles appeared to be much less, however, than in an ordinary uncomplicated case of hæmaturia, dependent on traumatic lesion, and active hæmorrhage from the kidneys or bladder; and I supposed that a large portion of the colored blood corpuscles, effused with the tubuli uriniferi, had simply parted with a large portion of the coloring matter, which was washed out by the urine.

This specimen of urine, which had stood about six hours in an open vessel, contained some sporules and delicate branching filamentous cells, of a fungous growth. The presence of these plants appeared to be due to the exposure of the urine in the ward, as they were not observed in specimens of urine collected subsequently in stoppered bottles. ℞—Quiniæ sulph., ʒj; acidi sulphurici aromatic., gtt. x; aquæ, fʒvj. M.—One-half at once,

and remainder in one hour and a half. Diet, beef tea and stimulants.

29th, morning. Quinine retained; patient says he passed a very restless night, and suffered with ringing in the ears and head; vomited during the night a greenish fluid, and now complains of nausea. Sweated profusely during the night; features pallid and sunken; fingers wrinkled and shrivelled; pulse 140; temperature of axilla 104°F.; skin moist and relaxed; thirst extreme. ℞—Chloral hydrati, ʒiij; syrupi cort. aurantii., fʒij; aquæ, fʒiv. M. S. fʒj every half hour until the patient is quiet. Continue nutritious food and alcoholic stimulants; apply sinapisms over epigastric region; continue acid drinks. Patient passed at one time fʒxij of bloody urine; the color does not appear so deep, however, and the albumen and colored corpuscles have diminished in amount. Sp. gr. 1,026; reaction acid; turbid when passed; upon standing, there is a heavy, brownish yellow flocculent deposit. Under the microscope, deposit consists of numerous cells from the urinary tubes, highly colored by the coloring matters of the blood and bile; also numerous casts of the tubuli uriniferi, filled with colored blood corpuscles and highly colored fibrinous matter.

4 P. M. Symptoms unchanged, except an inclination to sleep; stomach still very irritable; temperature of axilla 104°; pulse 140; skin hot but moist; urine red; great thirst.

30th, 9 A. M. Passed very restless night; nausea continuous; skin hot but moist; thirst very great; pulse 150; respiration 30; temperature of axilla 104°; great pain in the region of the kidneys. Urine much lighter color, deep orange red, with heavy yellow deposit of excretory cells, and casts of the tubuli uriniferi; also contains blood corpuscles. Sp. gr. 1,022; reaction acid. The color of the morning urine is lighter than that passed during the night, and contains much less blood, and fewer excretory cells and urinary casts. Forty-seven fluid ounces have been passed in twenty-four hours; heat and nitric acid produce only a slight coagulation in the last sample passed this morning. ℞—Magnesiæ sulph., ʒj; aquæ, fʒxvj: Make solution. S. Wineglassful every hour until the bowels are moved. ℞—Antimonii et pot. tart., grs. ij morphiæ sulph., grs., ij; aquæ, fʒviij. M. S. Tablespoonful every four hours until nausea is induced. ℞—Quiniæ sulph., grs. xx; acidi sulph. aromat., q. s. Make ten pills and administer at once. Continue nutritious diet and alcoholic stimulants.

4 P. M. Skin warm but moist; complains of distressing nausea; thirst very great; pulse 130; temperature of axilla 103°; has had two small evacuations.

31st, 10 A. M. Much improved; rested well during night. Nausea, but not to extent of yesterday, prevented the administration of tartar emetic solution. Bowels moved seven times during past twenty-four hours. Nausea increased immediately after the administration of the Epsom salts. Skin moist, relaxed; great pains in the lumbar regions. Pulse 110; respiration 20; temperature of axilla 100 5°. Some appetite. Urine abundant, sp. gr. 1,019; reaction acid; light orange yellow, nearly normal color; blood corpuscles, casts and cells of urinary tubes, greatly diminished; albumen greatly diminished. ℞—Quinia sulph., grs. xx; administer at once.

January 1st, 1872, 9 A. M. Patient greatly improved; pulse 97; temperature of axilla 99°; respirations 20; skin moist and relaxed; gentle perspiration; urine normal in color; no deposits. Under the microscope, only a few cells and casts discovered. Mere trace of albumen. ℞—Tinct. ferri sesquichloridi, f℥ss; quiniæ sulph., ℥ss; aquæ, f℥xvj: M. S. Wineglassful three times a day.

In the preceding case, the colored globules of the blood were greatly diminished. This change in the *blood* was characteristic of all such cases which have come under my observation. I have observed other cases of malarial hæmaturia in which the changes of the urine were similar, and in which there was in like manner evident congestion of the kidneys, attended with desquamation of the excretory cells of the tubuli uriniferi, and active hæmorrhage.

In some of these cases, immense quantities of green biliary fluid were vomited, and the patient died in a state of hopeless collapse, with depression of temperature, and cold extremities, covered with a cold, clammy sweat. As a general rule, suppression of the function of the kidneys is a fatal sign, and, as in yellow fever, may be attended with convulsions, delirium and coma.

The pathological changes observed after death are characteristic of malarial paroxysmal fever: enlarged slate and bronzed-colored liver, with pigment granules; enlarged and softened, or indurated spleen, with altered globules and pigment granules; gall-bladder distended with thick, ropy bile, presenting, when seen *en masse*, a greenish-black color, and in thin layers a deep yellow. As much as 1600 grains of bile, of high specific gravity, have been obtained from the gall-bladder in malarial hæmaturia; whilst in yellow fever, not more than 120 grains of bile are, as a general rule, contained in the relaxed gall-bladder. In some cases of the disease, I have found the gall-bladder *containing only an albuminoid liquid coagulable by heat and nitric acid; and in other cases of yellow fever I have found the gall-bladder*

distended with dark, liquid blood. When blood is found in the gall-bladder after death from yellow fever, its presence must be referred to the same causes which induce the black vomit from the stomach in this disease.

The bile of malarial hæmaturia is highly concentrated, and, as far as my experience extends, *never contains blood;* neither is the dark-green (*black*) vomit of this disease blood or altered blood, but it is an acrid secretion from the stomach, highly charged with bile.

Bile is universally present in the vomited matters of malarial hæmaturia. Bile is universally absent from the black vomit of yellow fever.

In the former disease, the whole system—blood, stomach, intestinal canal, and organs generally, are deluged with bile; in yellow fever, the coloring matters and acids of the bile are found in the blood; but in the third stage of the disease, namely, that of calm and depression and black vomit, bile is absent throughout the gastro-intestinal canal.

The kidneys, after death from malarial hæmaturia, present a deep-red purple congested hue, and their sections, examined under the microscope, exhibit the tubuli uriniferi filled with coagulated blood. In many specimens, the rupture of the capillaries occurred chiefly in the Malpighian corpuscles, and the tubuli uriniferi can be traced through their whole extent, as brilliant opaque cylinders filled with coagulated blood.

The best demonstration which I have been able to give my students of the relationship of the excretory structures of the human kidney, have been derived from sections of the kidneys of malarial hæmaturia.

It is evident, therefore, that the issue in any case of malarial hæmaturia will largely depend upon the number of urinary tubes thus blocked up with coagulated blood.

In yellow fever, the tubuli uriniferi are blocked up with detached cells, yellow, granular and oleaginous matters, but not with blood corpuscles.

Malarial hæmaturia and yellow fever, although possessing some symptoms in common, are distinct diseases, and require different modes of treatment.

As far as my experience extends, I have been led to rely in the treatment of malarial hæmaturia chiefly upon such measures as—1st. Prompt purgation, with such agents as calomel, extract of rhubarb and aloes. 2d. Counter irritation over the region of the kidneys. 3d. Cut-cups—the local abstraction of blood over the region of the kidneys by cut-cups. 4th. Quinine in full and sufficient doses to prevent the recurrence of the paroxysms. If

rejected by the mouth, the quinine must be administered by the rectum; and if both avenues are closed, in virtue of incessant purgation and vomiting, then it may be introduced by subcutaneous injection, or through blistered surfaces. 5th. Nutritious diet, in small quantities and at regular intervals, when retained by the stomach. 6th. The persistent use of calomel, rhubarb, aloes and colocynth, in small doses, combined with quinine, at regular intervals three or four times a day, during the continuance of the jaundice, if the bowels are torpid. 7th. After the establishment of convalescence, the continuous use of such tonics as the nitro-muriatic acid and tincture sesqui-chloride of iron, in combination with quinine; nutritious diet, generous wine, and change of climate to an elevated non-malarious region, if within the power of the patient.

Book Notices, &c.

Lectures on Practical Surgery. By H. H. Toland, M. D., Professor of the Principles and Practice of Surgery, and of Clinical Surgery, in the Medical Department of the University of California. With Numerous Illustrations. Philadelphia: Lindsay & Blakiston. 1877. 8 vo. Pp. 510. Price (in cloth), $4.50. For sale by Messrs. Ellyson & Yancey, Richmond).

It is extremely seldom that lectures which are entirely extemporaneously delivered will suit for *verbatim* publication. The impressive style and manner of delivery cannot be transferred by printers' ink. Everyone of experience has time and again heard flights of oratory that, at the moment of delivery, were graphic and soul stirring; but which failed of effect when *verbatim* or stenographic reports were read. So it is in this case. The eminence of Dr. Toland, and his recognized ability, both as a student and as a surgeon, justified an expectation in this book which has not been realized. True, the book may serve the purposes of college-students as a text-book for sessions that are not over four and a half or five months in length, and where the professor "cuts" a number of the lectures. But the author should have remembered that the students who requested him to write a text-book are, at the time that it is published, practitioners, and as such demand a more perfect work—one that is more thorough and comprehensive. For such practitioners, a work that is more full of details and that treats of more diseases than

can be described in a course of lectures, as now-a-days delivered, is demanded. For instance, neither Potts' disease, nor cystitis nor many other like common surgical diseases receive any special consideration—some not being even mentioned in the table of contents nor in the index. But the work does have the value of being the record of many personal experiences and observations in a long list of surgical diseases and operations; and for this reason the work is desirable and useful to those who are devoting anything like special attention to surgery.

A Treatise on Gonorrhœa and Syphilis. By SILAS DURKEE, M. D., Consulting Surgeon of the Boston City Hospital, etc. Sixth Edition, with Eight Colored Illustrations. Philadelphia: Lindsay & Blakiston. 1877. 8 vo. Pp. 467. Price $3.50. (For sale by Messrs. Ellyson & Yancey, Richmond.)

The popularity of this work is attested by the fact that since 1864, when the second edition was published, four editions have been demanded. But on reviewing the work before us, it does not seem that the editions subsequent to the second have been properly revised in keeping with the advanced views of to-day. For instance, the word "chancroid" no where appears, and the doctrine of the duality of the venereal sore is discussed as if the suggestion had just been made. Again, we find no reference to the local treatment of venereal sores by iodoform and other agents which have in the last five years generally superseded all resort to the escharotic class of agents, unless in a few very exceptional instances. In short, the book is not "up to the times" as regards advances made since 1864. But as a plain, practical book, incorporating all that was known at that date, and regarding which no special advance has since been made, this is a valuable work. It will serve as an excellent book to suggest well established practice. The descriptions of the different appearance of the several diseases, too, are first-rate; and the colored illustrations of skin eruptions, due to venereal disease, are useful, although they are too daubed.

The Elements of Therapeutics: A Clinical Guide to the Action of Medicines. By DR. C. BINZ, Professor of Pharmacology in the University of Bonn. Edited by EDWARD I. SPARKS, M. A., M. B., OXON; F. R. C. P., Lond, etc. New York: Wm. Wood & Co., 1878. 12 mo. Pp. viii—348. (For sale by Messrs. West, Johnston & Co., Richmond.)

This American reprint of the English edition is a translation of the fifth German edition, and edited by Mr. Sparks, with additions, in conformity with the British and American Pharmaco-

pœias. A considerable amount of new matter which did not appear in the last German edition, has also been added by Prof. Binz.

This book is truly what its title claims—"a clinical *guide* to the action of medicines." It is not exhaustive in any respect, but treats more of new remedies than any of the books lately published. It is written in brief, terse sentences, and conveys a large amount of information in a small compass. It is a most valuable work to every teacher; it is no less valuable to the student; and to the general practitioner, it will give definite information, and often afford suggestions of practical value not found elsewhere. It is *not* a materia medica; it is a therapeutic handbook.

Etiology of Enteric Fever. By JAMES L. CABELL, M. D., University of Virginia. (Extracted from the *Transactions of the American Medical Association*, 1877.) Pp. 51.

This pamphlet has been so ably and favorably reviewed by the distinguished Secretary of the Virginia State Board of Health, Dr. L S Joynes, of Richmond, in the *Transactions of the Medical Society of Virginia*, 1877 (published as a part of the last number of the *Medical Monthly*), and so entirely in accord with our convictions that we must content ourselves by referring our readers either to the paper of Dr. Cabell or to the report of Dr. Joynes.

The Druggist's Hand-Book of Private Formulæ. By JOHN H. NELSON, of Livonia Station, N. Y., Cleveland, Ohio: 1878. Pp. 206—12 mo. Price $3. (From the Author).

"The object of this little volume is to place before every druggist reliable formulæ for preparing well-known medicines not given in the U. S. Dispensatory or Pharmacopœia." We have examined this work with a good deal of interest and profit. It contains just exactly that information so often needed that is not given in the standard works on Pharmacy or in the Dispensatories—the little odds and ends of information required in the drug store, and very frequently also by the physician. It is divided into four departments—*First*, The Pharmaceutical, which gives formulæ for elixirs, medicated syrups and wines, emulsions, powders, solutions, tinctures, syrups for soda-water, flavoring extracts, concentrated essences, etc. *Second*, The Perfumery Department, which contain formulæ for handkerchief extracts, colognes, pomades, etc., etc. *Third*, Proprietary Medicines *Fourth*, Miscellaneous Formulæ. The Appendix also contains

much important information, chiefly on adulterations and tests of essential oils, etc.

While this book omits mention of some things that would add to its value—for instance, formulæ made known by analyses of a number of popular proprietery medicines, etc., such as are being published from time to time in the Annual Almanac of the American Pharmaceutical Association, etc.—still it will be found a valuable aid to every druggist and to many physicians.

The Action of Medicines. By ISAAC OTT, A. M., M. D, Formerly Demonstrator of Experimental Physiology, University of Pennsylvania. With 22 Illustrations. Philadelphia: Lindsay & Blakiston. 1878. Price $2. Pp. 168.

This is a publisher's venture, we think. We fear that there is not a demand among the American *practitioners* for an independent publication of this kind. The American profession is as yet soo utilitarian, or rather, too clinical in their wants to call for this book separately from a therapeutic work. This manual undertakes to explain the physiological action of medicines; and in the field of physiological study, will prove a most valuable aid. Its details relate almost exclusively to the vegetable kingdom. Arsenic, iron, phosphorus, lead, zinc, silver, etc., are not spoken of; although the actions of tartar emetic and bromide of potassium are given.

While we are watching with earnest interest every advance made in the study of the physiological action of drugs, and unreservedly commend every effort made to establish a sound theratics upon the physiological basis, we have been so often misled, and seen others misled by too exclusively adopting this comparatively new system that we confess as yet a preference for the clinical basis, for reasons which have time and again been repeated.

Dr. Ott's book, however, will prove of great value to every professor of therapeutics, to toxicologists, to physiologists, and to all who are striving to keep pace with advances in this special field.

A Treatise on Acology and Therapeutics, with some of the most Prominent Principles and Rules of Chemical and Mechanical Pharmacy. By J. G. WESTMORELAND, M. D., Professor of Materia Medica and Therapeutics in Atlanta Medical College. Atlanta; Ga.: Plantation Publishing Company's Press. 1873. By mail. Pp. 391.

In looking at the publisher's announcements of "new books"

for the past few months, one will see what importance is being given to the study of means to cure disease. One author tries to suggest a remedy from its experimental actions on cats, dogs, rabbits, etc., although it is a daily practical observation that most men are neither the one nor the other; or he struggles to establish a therapeutic fact by the known action of a medicine in health, etc. Another rushes too hastily into print to affirm a therapeutic virtue because of the effect of an agent in a single case—his observations being frequently too insufficient or imperfect to serve as a clinical guide. One author commends in the highest terms a certain amount of empiricism, and assures us that physicians who are the most successful practitioners are in reality empiricists. Another author warns the beginner, "early in his course of study, to shun the breakers of empiricism," although every one admits that "perfection is not claimed" as yet for any physiological classification.

We are sorry to have to say that the book before us is neither valuable as a physiological nor as a therapeutic work—at least, as a book for the practitioner of to-day, it is not up to the times. No mention is made, of course, of such every day agents as amyl nitrite, jaborandi, salicylic acid, salicin as a remedy in rheumatism, etc. Of hops, it is said "the profession recognizes them only as a gentle gastric stimulant," whereas practitioners throughout this section of country still rely upon the "hop bag" or "pillow" as a useful soporific.

But no book that ever was of value is so old as not to contain something worth reviving. Thus we find here a statement of the virtue of the bark of the viburnum prunifolium as a uterine sedative. As an anti-abortive, it is preferred by the practitioners of Atlanta to opium; and is useful also "in neuralgic pain and general uneasiness from irritable condition of the womb." A number of such facts are mentioned of practical value in connection with other drugs; but most of them are more fully and definitely stated in later works.

Public Hygiene in America. By Henry I. Bowditch, M. D. With Extracts from Correspondence from the various States, together with a *Digest of American Sanitary Law.* By Henry G. Pickering, Esq. Boston: Little, Brown & Co. London: Trubner & Co. 1877. 12 mo. Pp. viii—498. (For sale by Messrs. J. W. Randolph & English, Richmond, Va.)

This volume is an amplification of the Centennial discourse of Dr. Bowditch delivered before the International Medical Congress, in 1876. It represents the status of State Medicine at

this time, and has been prepared at the expense of much labor and period. The result will prove a great benefaction. The statistical information given in this book, and the digest of sanitary laws in each State will make it valuable for years to come. The subject of State Medicine is being brought forward so often in medical journals, and its importance urged by "Reporters" to Societies, etc., that it is only necessary to say that all the arguments, and the basis for them are to be found in this work.

Puerperal Eclampsia. An Address to the Christian County (Ky.) Medical Society. By J. P. THOMAS, M. D., Pembroke, Ky. (Reprint from *Richmond and Louisville Medical Journal*, September, 1877.) Pp. 18.

The author combats the physiological basis of studying pathological conditions and of applying therapeutics. Albuminuria does not bear the relation of cause to effect in the production of puerperal convulsions; the twin occurrence is simply a coincidence except in very rare cases. We have long thought also with Dr. Thomas, that Marshall Hall's theory of the "reflex motor action of the nervous system" is the nearest approach we have of a solution of the question of causation. Dr. T. maintains that evidence points rather to hyperæmia than to anæmia of the brain as the condition of the brain in eclampsia, and he joins with Dr. Henry F. Campbell and every other practical observer in affirming that convulsions are not produced by loss of blood *per se*. These views, coupled with the result of his experience (one death only in fifteen cases of puerperal convulsions he has attended), lead Dr. Thomas to name his therapeutic wants in the following order: chloroform, the lancet, veratrum viride, hypodermic syringe, chloral, opium, the bromides. Although he places the lancet second in the list, it might not be used once in ten cases. He always administers a full dose of calomel for its cholagogue and cathartic effects. All in all, this is a first-rate practical paper.

Pamphlets, reprints, etc, that we have no room to notice in this number:

Surgical Treatment of Perityphlitic Abscess. By J. H. POOLEY, M. D., Columbus Ohio.

House Air, the Cause and Promoter of Disease. By FRANK DONALDSON, M. D., Baltimore, Md. (*Md. State Board Health Reports*, 1878.)

Certain Points relating to the Nature and Treatment of Lu-

pus. By HENRY G. PIFFARD, A. M., M. D., New York. (*Trans. Med. Soc. State N. Y.*, 1877.)

Contributions to the History of Medical Education and Medical Institutions in the United States of America—1776–1876. (Special Reports prepared for the United States Bureau of Education.) By N. S. DAVIS, M. D., 1877.

A Succinct History of the Plan of Treatment of Pott's Disease by Suspension, and the Use of Plaster of Paris Bandage. By LEWIS A. SAYRE, M. D., New York. (This reprint from the January number, 1878, of *Richmond and Louisville Medical Journal* will convince any unprejudiced mind of the justness of every claim Dr. Sayre has made as to the originality or uses of this plan of treatment.)

Remarks of Dr. H. A. Martin on the Treatment of Fistula in Ano by Caustics. (*Boston Medical and Surgical Journal.* Aug. 2, 1877.

Safety of Ships and of those who Travel in Them. By JOHN M. WOODWORTH, M. D., Supervising Surgeon General, U. S. Marine Hosp. Service. *Transactions American Public Health Association*, 1875.

Dressing of Stumps. By LOUIS BAUER, M D., M R. C. S., etc. (*St. Louis Clinical Record*, November and December, 1877.)

Defects of Hearing and other Evils: the Result of Enlarged or Hypertrophied Tonsils, and the Urgent Necessity of Immediate and Proper Treatment, in Order to Restore the Ear and other Neighboring Organs to their Accustomed Functions. By A. W. CALHOUN, M. D., Atlanta, Ga. (A good paper on an important subject, from *Transactions Medical Association Ga.*, 1877.)

A Review of the Recent Theories of Brain and Nerve Action the Use of Electricity in Medicine and Surgery, etc. By JOHN J. CALDWELL, M. D., Baltimore, Md., 1877.

Nature and Treatment of Convergent Strabismus. By SAMUEL THEOBALD, M. D., Baltimore. (*Maryland Medical and Surgical Journal*, Dec. 1877.)

There are fifty odd other pamphlets, reprints, etc., for which we have not space to give even titles.

Editorial.

The Opium Habit is a vice of fearfully rapid development and growth. Until very few years since—since the war—it was limited almost exclusively to the Northern States, so far as the United States were concerned. There the importance of the subject has long been recognized; and to meet the growing demand, asylums, retreats and private hospitals have, from time to time, been established. But now the vicious habit has attained awful proportions, and must hereafter be spoken of as national in its extent. Certainly it is of most rapid growth in the South. The press of Georgia especially—secular and medical—has of late been bringing out facts that tell what a terrible sweep it has in that State. And now the papers of Virginia are recording appalling facts in regard to the habit in this State. Only within the past month the Staunton papers tell the sad story of a woman who had become so great a slave to the habit that she had from time to time sold off almost every article of necessity on the farm in order that she might keep herself supplied with opium or some of its preparations. One day in January of this year she sent her last two horses to the Staunton market, with instructions to the messenger to invest the entire proceeds from the sale of one of the horses in opium. The hours hung heavily, and when the evening hours came she watched anxiously for the return of the messenger with his load of morphine; and when, through the gathering twilight, she saw him returning with both horses—neither of them sold—she knew he had not brought her the morphine. Her disappointment was unbearable. As one overcome by some powerful nervous shock, she swooned, fell, and in a few moments more she was a corpse.

"'Her mother is selling the clothes off'n her back,' remarked the colored man at the office of the *Vindicator*, who weighs the rags for the paper-mill, as a little white girl, neatly clad, but wearing a grown person's shawl, received the money for the rags she had brought. The rag-weigher was holding up a piece of lady's underwear, of fine make and little worn, which he had taken out of the rags; and he explained that the girl was the child of an opium-eater, who used the money to purchase the drug."

A reporter then made a circuit of the "druggists" of Staunton January 23d, with the following summary result, published in the *Vindicator:*

Number of druggists interviewed, 5. Three of these druggists

had 60 confirmed opium-eating customers that they could readily recall; besides there were others whose names they could not remember at once. One of the other druggists sold during 1877 upwards of 19,898 grains—more than two grains to each inhabitant of the town. The other druggist stated that formerly his average sales were about an ounce per month; last year he sold forty ounces; but as an index of the rapid increase of consumption, he had sold during the twenty-three days of January, 1878, eight ounces.

Of the 60 opium-eaters definitely named by the first three druggists, 43 were females and 17 were males. The fourth druggist makes no statement on this subject; but the fifth states that "ladies are the chief customers."

As to relative ages of the customers of the first three druggists, 25 ladies were of middle age; 18 were young ladies. Of the men, 5 were old; 12 were young men. The other two druggists make no statement on this point.

All five of the druggists speak of the rapid increase both as to the amount of the drug used, and the number who use it. All five agree that the habit is principally confined to the better classes of society. It is too expensive for the poorer classes.

As to the dose, one druggist has a customer who uses sixty grains of opium a day. Another druggist has a customer who uses *half a pint of laudanum in twenty four hours*. Each ounce of laudanum, according to Parrish's *Treatise on Pharmacy*, contains thirty-seven and a half grains of opium; hence this customer's habit was *three hundred grains of opium daily*, or, by the same authority, fifty grains of morphia. Another druggist has a lady customer who uses twelve grains of morphia daily, who, not long ago, contented herself with three grains daily. Another has a lady customer who takes from twelve to fifteen grains of morphia daily. One of the worst opium-eaters spends as much as *one dollar daily* for opium with one of the druggists. Another of the five druggists states incidentally that the price of opium in Staunton is $1 an ounce.

Almost every artifice that can be thought of is resorted to by the unfortunate victims to obtain their opium, so as to avoid detection. They tell all sorts of lies to get it. Church membership is not a safeguard. A lady will get a bottle of laudanum, and send the bottle back to be refilled, saying the stopper came out and the contents were spilled. Respectable ladies will hang around the store doors, and send children in to buy it for them. If the druggists of this town decline to sell the article to parties, they will send to Charlottesville, or Harrisonburg, or other near town to have their orders filled. Some of the ladies will sell

jewelry, provisions, their very clothing from their backs, to get money to buy their morphine.

Some take the opiate because of trouble; but the large majority take it because of the pleasant effects. Generally, the habit begins with a physician's prescription. Sometimes the physician continues to order it. The physicians are greatly responsible for the habit, by their free prescriptions of morphine. In one case the lady commenced using it so freely that the druggist spoke to her husband about it. The husband said "it was the physician's orders, and he did not like to interfere." In many cases, where ladies have become victims to the habit, the heads of families tell the druggists to let their wives or daughters have what they want, "as it is no use trying to break them" of the habit. One old gentleman comes to his druggist three times a week to get opium for his daughter, "who goes mad if she does not get it."

We have made this full synopsis of the detailed report in the *Vindicator*, because the dreadful importance of the subject demands prompt and serious consideration of physicians, and the wisest counsels of legislators. The habit has been growing ever since the war, and the evil was sufficiently recognized as having an existence in Virginia three years ago, when the Pinel Hospital in this city was organized, to induce the incorporators to insert a special clause in the charter providing for the cure of opium inebriates.

More insidious than any of the usual intoxicants in making slaves of its victims, opium develops a species of dishonest or deceitful trickery in those who are not artful in other matters. Worse than this, and the drunken glow, and dangers to physical health and life, there results in the confirmed opium-eater a kind of paralysis of the volition power, which renders the victim subject to be imposed upon by those of the vilest passions. The will power is gone, and the enslaved have not the power to resist, in many cases, the feeblest temptation. De Quincey, in his *Confessions of an English Opium-Eater* lays stress on this fact; and the daily observation by the physician of his unfortunate cases of this kind confirms the statement as true. Sometimes even the virtue of womanhood is sacrificed during an hour of opium drunkenness—not that the virgin was over-amorous, or that her thoughts or delirium would have naturally led her astray, but that she has lost the power of resisting the suggestion offered by a vile seducer. Only the other day, an acquintance told us that he knew of three or four women who are now inmates of houses of prostitution, simply as the results of seduction while they were drunk with opium. Most physicians who have extensively

investigated the subject can name instances where the subjects of the opium habit have in similar manner fallen from the heights of social position and moral influence into the lowest depths of degredation. What will become of the moral tone of a people, when the women sink so low?

But there are a large number of confirmed opium eaters who are not yet physically, mentally or morally wrecked who are anxious to be released from the grip of the bands which enchain them. There are many more distressed parents, husbands and wives, brothers and sisters anxious to have their loved ones free of the vice. There are still many more growing up into manhood or womanhood who have not yet known the delirious craving that are to be placed beyond the dangers of contracting the vicious habit. Fortunately, up to the present time, opium eating is not much practised in our rural districts. But unless some preventive or prohibitive measures are at once devised, it will not be many years before our country friends will appreciate the full force of every word we are now penning. The "opium habit" has become common enough in this city among some of those of highest intelligence and of the best social position and wide spread influence to exert a baneful effect upon some of their associates. As yet, it is a secret vice, and purchases are slyly made. Unhappily, the more perfectly to escape detection by city druggists, some parties have learned through drummers for wholesale houses and others, the addresses of large dealers in other States from whom they receive packages by express, or through the mails.

On the other hand, again, many who are trying to cure themselves of the habit are daily imposed upon by the many so-called "opium cures" which are flooding the market, and bottles of which are to be found in many drug-stores. These "cures"—without exception, so far as we know or believe—contain unknown quantities of morphia. So that the victim, as he swallows the deceiving dose, is but harboring his old enemy.

There can be no doubt but that physicians are too often the originators of the opium habit by imprudence in prescribing opium or one of its preparations. Let the conscience of each one who is guilty of unnecessary prescriptions of opium, or who continues its use without due care or caution, ask himself how much of this rapidly-spreading vice is due to himself. Although we have never heard of the institution of a suit at law against a practitioner for malpractice, who, by carelessness of prescription, has led his patient into opium-eating, there can be no more doubt of his responsibility before a court of justice than is the surgeon, who, by neglect of duty, allows a fractured bone to become hideously deformed.

We will not here speak of the production of the opium habit by the use of proprietary medicines, such as cough mixtures for chronic cases, etc.—which contain opium. Our object is accomplished if we have succeeded in impressing the importance of the subject, and in eliciting suggestions from our readers.

At a meeting of the Richmond Academy of Medicine, January 15th, before the developments were made in Staunton to which we have referred, a committee, consisting of Drs. Landon B. Edwards, James B. McCaw and W. W. Parker, was appointed to confer with a committee of like number from the Richmond Pharmaceutical Association (this latter committee consisting of Messrs. Hugh Blair, P. E. Dupuy and Joseph N. Willis) on the question as to what legislation, if any, can be suggested by which the vice of opium-eating can be limited. It is the desire of this joint committee to act intelligently as to the extent of the evil, and to receive suggestions as to its prevention and its cure. At a future time, a circular letter of inquiry may be distributed seeking precise information; but in the meantime, any volunteer suggestions from any quarter of the country as to the best method of proceeding on the part of the committee will be gratefully received.

Jaborandi Suggested for the Treatment of Hydrophobia.—While examining our recent Northern exchanges a few days ago, we were struck with the number of cases of hydrophobia that have lately occurred in some of the New England and Middle States. The terminations of these cases, as of former ones, have been so universally fatal that most authors doubt the correctness of diagnosis, or else impeach the truthfulness of the one or two writers who have reported cures of cases. In this state of affairs, it is legitimate practice to resort to any plan of treatment that may be suggested not wholly contrary to experience or judgment. He will, indeed, have been a recognized benefactor, and will have carved for himself an imperishable name who, either by study or by stumbling, falls upon a remedy of decided practical value in cases of this miserable disease.

A few days ago, we received a private letter from a subscriber in Thomasville, Ga. (Dr. R. L. Madison), which says:

"My thoughts for some time past have been occasionally occupied with the subject of hydrophobia, and the lamentable failures that have so far attended all efforts, even for amelioration. I am not sure, but believe it to be a fact that this disease originates idiopathically only in those animals which are destitute of 'sweat glands,' and in whom the great function of perspiration is performed, by substitution, by the salivary glands. Hence

the canine and feline races are conspicuously subject to the attacks of this horrible disease.

"But whether this be true or not, the first objective symptom attracting special attention, either in the dog or in the human subject, is an arrest of the usual salivary flow, and a dry and irritated condition of the tongue and fauces; and then the secretion of a thick, ropy, tenacious secretion which clogs the throat, rendering all effort at deglutition or expectoration, in the main, painful and futile. Hence, the dog will be seen tugging at his mouth with his forefeet, as if striving to extract a foreign body from his throat; while the human subject, similarly affected, will be making frantic attempts to clear his throat. Next follows spasms of the pharyngeal and laryngeal muscles, which are succeeded by the usual train of convulsions and death.

"Now, it has occurred to me that, if, in the early stage of the ropy secretion and arrested salivary action, some medicine could be administered which would promptly and powerfully rouse to functional activity the salivary glands, it might possibly so break the chain of morbid phenomena as either to cure the disease, or else at least enable one to gain time for the administration of other medicines named in the books.

"The remedy I would suggest, you have doubtless already anticipated. It is that a fair and full trial be given to jaborandi, or to its active principe, pilocarpin, which is now known to be the best and most reliable sialogogue of any of the Pharmacopœias."

Journalistic.—The *St. Louis Medical and Surgical Journal*, under the new editorship of Drs. Thos. F. Rumbold and Hiram Christopher, comes to hand for January, with 80 pages, and—just as we had expected—in every respect a capital journal. $3 a year.

The *Detroit Lancet* is a new journal, of 80 pages monthly, edited with ability by Drs. Cleland and Connor—if the January number is an index of what future copies will be.

Our neighbor, the *North Carolina Medical Journal*, published in Wilmington, Drs. M. J. De Rosset and Thos. F. Wood, editors, sends us the January No., pages 68, $3 a year. If all goes well that begins well, the South will be proud to sustain this new enterprize.

The *Michigan Medical News* is a semi-monthly, of 12 pages, double columns, published at Detroit for $1 a year. Its first number was issued January 21. Dr. J. J. Mulheron – the well trained editor of the late *Peninsular Journal of Medicine*—is the Managing Editor, with a corps of eight assistants.

New York City Subscribers who will at once send to this office postal-card notification that they had to pay an extra postage of 14 cents on the January number, will not anly oblige us, but will, by return mail, have the amount refunded. We have heard thus far of only three from whom extra postage was collected, but presume there were others who were subjected to the same petty annoyance under a ruling of the Postoffice Department, of which we were not at the time aware, which appears to give a legal coloring to the act of the New York city postmaster. We have not been thus reminded of the "brief authority" of red tape from any other quarter. In view of the heavy mail we monthly send to New York city, we might have expected the courtesy—did we not know that some government officials are too often wanting in that element—of being informed of the error, and thus have allowed us an opportunity to make proper advances so as to save our subscribers the worry which they must have felt when the postal bill was presented them. It would have been much less troublesome to have collected one bill of $14, than to have collected 100 and more bills of 14 cents each.

The Summer Session of the Medical College of Virginia, 1878, will commence on Tuesday, March 12, instead of the date advertised in the January number. We cannot too strongly insist upon the importance of attending such a course of lectures. The summer session takes the place of the old system of office reading; but has the advantages that there are a full course of didactic lectures by competent lecturers; ample opportunities are afforded for dissecting early in the session while the weather permits. The Museum is abundantly supplied with pathological specimens and casts for inspections; drawings are abundant; clinical opportunities are afforded, etc. In addition to these, there is the stimulus to regular study of having fellow-students—a factor which should not be overlooked. The lecturers are among the best practitioners we have in our city.

The Health Commissioner of St. Louis is a non-medical man, and, of course, is incompetent. The *Clinical Record* accuses him of petty annoyances to the regular profession of that city. It tells the case of a prominent regular and registered physician, who certified as to the cause of death of one of his patients. The Health Commissioner (what is his name?) rejected the doctor's certificate because he had not seen his diploma. The Commissioner at once referred the case to the coroner, who sent his *deputy* to investigate the cause of death. The ridiculous feature is, that the deputy is not a graduate in medicine, and makes no pretensions to being a physician in any way.

The Bedford Alum and Iron Springs.—We take great pleasure in calling attention to these Springs, advertised in the *Monthly*. Virginia is remarkably fortunate in the value of her mineral waters, and during the "Springs Season" this blessing is especially recognized by the crowds from all parts of the United States that visit her watering places. Of these natural waters, none have a wider range of usefulness than those of the Bedford Alum and Iron Springs, whose virtues are extolled in this number by Dr. Blackford. These Springs are now under an energetic management, which is preparing a "mass" that contains the virtues of the waters, is far more convenient for sending to patients at a distance, and involves less expense for transportation than the bottled waters. The Editor has used the "mass" with good effect in catarrhal endometritis, endocervicitis, and vaginitis.

A Letter from Dr. S. P. Brown, dated February 1st, 1878, has been received, and would have been acknowledged, but he gives neither State, county or post office to enable us to give proper address to an envelope. Correspondents should remember to state these facts.

Number of Graduates in Medicine, session 1877–78, thus far reported: Nov. 5, 1877, Medical Department University of California, 15; Nov. 6, Medical College of the Pacific, 13; total, 28.

Obituary Record.

Edmund Randolph Peaslee, M. D., LL. D.—The severest shock for some time sustained by the profession was the unexpected death of this great physician, on January 21st, at his home in New York City. After a week of professional over-exertion, he had an attack of pneumonia, which did its sad work within a week. At the time of his death, he was within one day of being 64 years old, having been born at Newton, New Hampshire, January 22, 1814. He graduated from the Medical Department of Yale College in 1840, and in 1841 he commenced practice at Hanover, N. H. He held the professorship of anatomy and physiology in Dartmouth from 1842 until 1870. From 1845 to 1857, he was also professor of anatomy and surgery in Bowdoin College, and continued as professor of surgery alone until 1860. From 1851 to 1860, he was also a professor in the New York Medical College. The degree of Doctor of Laws was conferred

upon him by Dartmouth College in 1856, in which college he was elected professor of gynæcology in 1872. In 1874, he was elected to the same chair in Bellevue Hospital Medical College. In 1858, he moved his residence to New York City, when he adopted the specialty, in which department he became so justly eminent. It was particularly as an ovariotomist that Dr. Peaslee's reputation became world-wide. His book on Ovarian Tumors, etc., is the chief work of his life, and every one is familiar with it as authority.

Dr. Lunsford Pitts Yandell, Sr., died February 4th, after a short illness with pneumonia. He was born near Hartsville, Tenn., July 14, 1803. He graduated at the University of Maryland in 1825. For six years, beginning 1831, he filled the chair of chemistry in the Transylvania College. In 1837, he moved to Louisville, and was one of the organizers of the Medical Institute which subsequently became the Medical Department of the University of Louisville. In this Institution, he filled at different times the chairs of chemistry, materia medica and physiology. In 1858, he removed to Memphis, Tenn. During the war, he was for awhile in the Confederate hospital service. In 1862, he was licensed to preach, and for awhile was pastor of a Presbyterian church in Dyceton, Tenn. After the war, he removed to Louisville. He edited the *Transylvania Journal of Medicine*, at Lexington, Ky., and afterwards the *Western Journal of Medicine*, at Louisville. He was afterwards connected with the *American Practitioner*, and was a frequent contributor to the columns of the Louisville *Medical News*, from the pages of which this notice is mostly compiled. He prepared the "History of American Literature" for the International Congress. The last two years of his life were chiefly busied with a "History of Kentucky Medicine." His last written paper was on "The Diseases of Old Age," which will soon appear in the *American Practitioner*. He was the President of the Kentucky State Medical Society at the time of his death.

Dr. Paul F. Eve.—At a regular meeting of Abingdon [Va.] Academy of Medicine, the unexpected death of Paul F. Eve, M. D., an Honorary Fellow of the Abingdon Academy of Medicine [and of the Medical Society of Virginia], was announced. Drs. W. F. Barr and E. M. Campbell were appointed a committee to report a suitable preamble and resolutions.

The committee made the following report, which was adopted:

Of the distinguished men in medicine and surgery of the nineteenth century, few have occupied a more enviable position

than Dr. Paul F. Eve, late Professor in the chair of Operative and Clinical Surgery in the University of Nashville and Vanderbilt University. Never obtrusive, his exalted merit attracted an attention almost universal; and, judging from the many positions of exalted trust he filled, and always to the fullest satisfaction, few men will be more missed than Dr. Eve. To know the man was but to admire him, not only for his intrinsic merit as a man, but for his superior knowledge as a surgeon, and his remarkable success in his exalted position in his profession; therefore,

Resolved 1*st*, By the Abingdon Academy of Medicine, that we deeply deplore the loss to his country, the profession, and the world, of such a man as Prof. Paul F. Eve, M. D.

Resolved 2*d*, That this Association will ever endeavor to emulate the exalted virtues and the profound professional skill of one so eminent in all that constitutes the character of a good, noble and generous man.

Resolved 3*d*, That a copy of the above preamble and resolutions be furnished the family of the deceased, and also to the *Virginia Medical Monthly*, *Nashville Journal of Medicine and Surgery*, and the *Southern Medical Record* for publication.

Dr. Sylvester Albert.—At a regular meeting of Abingdon Academy of Medicine in December, 1877, the death of Sylvester Albert, M. D., a Fellow of the Academy, was announced. Whereupon, Drs. W. F. Barr and E. M. Campbell were appointed a committee to report suitable resolutions. The committee made the following report:

Although comparatively young, Dr. Albert had acquired an enviable reputation in the profession. He studied medicine at the University of Virginia, and graduated with credit to himself and honor to the institution. He was a laborious practitioner, and a faithful attendant on his patients. Therefore,

1. *Resolved*, That we regret the loss of Dr. Albert to the profession, the people of his country, and to his family.

2. *Resolved*, That we extend to his family our heartfelt condolence and deep sympathy in their great affliction, and for their comfort and consolation recommend them to Him "who tempers the wind to the shorn lamb."

3. *Resolved*, That a copy of these resolutions be forwarded to the family of our deceased Fellow; and a copy be furnished for publication in the *Virginia Medical Monthly*.

Dr. J. N. Mallicote died at his home in Abingdon, Va., November 4th, 1877, of congestion of the lungs.

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Original Communications.

ART. I.—*Pathognomonic Pulse of Small-Pox, before Eruption, and the Therapeutic Value of Vaccination during the Stage of Initial Fever.* By ALBAN S. PAYNE, M. D., Markham, Va.

In saying that I recognized variola by the pulse, before I dreamed of its existence amongst us, and before any eruption whatever had made its appearance, I do not wish to be understood as claiming for myself any particular astuteness; but rather to show that this disease has, in my opinion, a pulse of its own—*sui generis*, recognizable by any physician, who will patiently and carefully investigate this subject until his finger becomes educated. When once recognized, it can *never* be forgotten, any more than a physician who has once learned to detect the hæmorrhagic pulse could forget its peculiar thrill, imparted to his educated finger.

As the people at large are as vitally interested on this subject as the medical man, I shall make no attempt at a display of learning; but avoiding, as much as possible, technicalities, I will use only such plain language as the casual reader may understand.

And here let me state that this is no new thing with me. Thirty-four years ago, through the kindness of a distinguished medical friend, I was granted free access to all the public charities and small-pox hospitals of New York city. I had always in my childhood days felt a fearful dread of small-pox patients,

but, strange to say, after seeing two or three cases I became very fond of attending them.

Within a very few days after my introduction to small-pox hospitals, I began my experiments, with a strong presentiment of success. I soon became as well satisfied in my own mind of the correctness of my opinions as I am to-day; but I have waited *patiently*, before I made them public, to prove them by actual experience, not in one or two cases, but by many. Feeling every confidence that time and candid investigation will prove the correctness of my views, I cheerfully submit to time and that grand arbiter of the reputation of men, posterity, to do me full justice.

My plan is to examine the patient twice a day, and as soon as the *primary*, or initial fever, is recognizable by the pulse, vaccinate him. This is an improvement on Jenner's mode of vaccinating, and a very great improvement, indeed, on innoculation. If done within ten or twelve hours after inception of the initial fever, the patient will have slight indisposition without a *sign* of eruption, and as positive exemption from a recurrence of the disease as he will *be* from having the disease in the most malignant form. The most remarkable feature about the whole thing is, that if the patient is vaccinated early after the initial fever sets in, he may be allowed then to go where he pleases without any fear of giving the disease to others. The engrafting of the vaccine matter upon the primary variolous fever, seems to have the power to destroy its ability of *reproduction* or *propagation* entirely.

Another peculiarity is this: If an unprotected patient is vaccinated before the inception of the initial fever, and the vaccine takes, but does not prevent—only modifies the disease—the eruption will be varioloid in its appearance and characteristics. But if vaccinated after the commencement of the initial fever, and too late to prevent entirely an eruption, the eruption will resemble in size and other characteristics the small-pox eruption—it matters not whether there is one or a hundred pimples.

There is as great a difference in the appearance of the varioloid eruption and the small-pox eruption as there is between gray and yellow. I shall, therefore, speak of small-pox as confluent, semi-confluent, discrete, modified and manipulated—the last

being a synonym of my own. The cases that occurred in this neighborhood in 1873, were of the variety known as variola nigra, of Sydenham, and when not modified by some benign influence, were invariably confluent. The cases occurring in and around Manassas were of the same variety.

On the evening of January 1st, 1873, I was sitting in my office in conversation with Professor Middleton Goldsmith, late Professor of Surgery in Louisville Medical College—my partner, Dr. Iden, being also present. About 10 o'clock P. M., James Poles, a man of color, came in and said "there was a very sick man at his house, with some kind of *breaking out*, and wished me to go to see him." To the pertinent question put to him by Dr. Goldsmith, "Does the breaking out go in, and then come out again," he said "he believed it did." "If you are correct in that, it is not the small-pox," remarked Dr. Goldsmith; "probably the measles." Dr. Iden answered this call for me. I learned informally the next day that it was a case of "black measles." On the 4th, the patient died. (My views concerning "black measles" were given in the *Transactions Med. Soc. of Va.*, 1872, p. 61.)

Scarcely thirty feet apart, and next door to my office in the hotel of the village (my office being in my dwelling), is the bar-room of the hotel; the kitchen to the hotel is thirty feet in its rear and almost in my backyard. About 1 o'clock on the night of January 11th, 1873, I was hastily called to see Bettie Wilson, the chambermaid of this hotel. Bettie was a hale, hearty, plethoric young colored woman, 19 years of age. I found her upstairs in the kitchen to the hotel. I found the female cook and two colored men in the room. She was faint and almost pulseless from the great loss of blood. I made a vaginal examination, and whilst I was satisfied she had just aborted, I could find neither the secundines nor the fœtus. From the character of one of these men, I suspected abortion by the "knitting-needle process." I manipulated the uterus until the contraction was sufficient for immediate safety, and then I gave her a powder containing ipecac, gr. 1-6, opium, gr. ½, acetate of lead, grs. iij. Repeat *pro re nata*. As soon as her pulse began to rise, I recognized its peculiarity, and immediately said "bring me a light; this woman has the small-pox." The eruption did

not make its appearance until the next day. I saw it would never do to remove this woman, and I determined to *isolate* the case and abide the consequences, be what they might. "If I have her removed," I said, "the poor woman must die, and the prevailing winds will blow the virus for miles down the valley below, and the disease will spread beyond control; but, by isolating the case, I have every confidence in my ability to check it. But should she die, she must be removed for burial (and that she will die, there is strong probability), and my plans will be defeated, and I shall incur the reproach of all my friends and neighbors." These were grave considerations, and I was by no means reclining upon a bed of roses. But firm in the faith of my own opinions to the greatest good, and looking to the greatest number, I never faltered. I said to myself, if she dies I will wrap her from her toes to the crown of her head in double-linen sheets, and with the aid of some one who has had the small-pox I will bury her.

The two men and the cook had been vaccinated in July, but I ordered them to report to me twice every day, made them take off all their woolen clothing, and put on linen suits (which I procured for them), burnt up their cast-off clothing, and made them wash themselves from head to foot, hair and whiskers, before I would let them go out of the kitchen. They reported regularly. On the 24th of January, one of the men's pulse gave the peculiar feel. I re-vaccinated him; he was indisposed for two days; arm sore, but no sign of a pustule appeared. The cook and the other man never showed any sign of either varioloid or small-pox. I repeatedly vaccinated them, without its ever producing any effect whatever.

Bettie, after having the disease in its semi-confluent form, was convalescent by the 30th; however, I kept her strictly in her room until the 15th of February, by which time the "panic" was over, and I could afford to laugh when pointing to the small-pox pits on Bettie Wilson's face.

On the 24th day of January, 1873, I was called to see W. J. His message was, "Come and tell me what the breaking out I have is." When he opened the front door for me, and I saw the eruption, I immediately said, "I am sorry to tell you, you have modified small-pox, commonly called varioloid." The

family consisted of his father, two sisters at home, a younger brother, and an aged aunt. I vaccinated his father and two sisters—his old aunt refusing, and his brother was absent at school. I was very anxious to vaccinate this estimable old lady, for I saw she had not been vaccinated for very many years. So I rode down the next day purely to persuade her to let me put some of the vaccine virus in her arm, but she firmly declined, saying, "it could not cheat her out of many years," &c. I found the brother at home with the "peculiar pulse." As he was unprotected, I vaccinated him. He called at my office the next day, when his arm looked as if vaccinated eight days before; it rapidly became sore; he was indisposed for two or three days, and recovered without a single sign of eruption.

There was no more trouble at this house until the 7th, when the old lady was taken with pain in the head and vomiting. Her family physican was called in, but considered it "one of her old attacks." She died on the 10th.

On the evening of the 25th, I visited Charles Gaines, fifty years of age. He had been vaccinated thirty years ago, and had a tolerably good-looking scar, but he was breaking out with confluent small-pox. The family consisted of Mary, his wife, 45 years old; Harriet, his daughter, 17 years old; Martha, 15; Henry, 10; James, 7. Tom Baltimore, a robust young colored man, 21 years old, and Jane James, 16 years old, his paramour, were only visitors. Harriet was pregnant—about 6 months gone. I vaccinated all with the same matter on the 25th. I thought the initial fever had commenced about three days before my visit in Harriet's case. There seemed to be a hitch in her case, which I attributed to the fœtus being sick; but she was not well enough to work, nor sick enough to go to bed, although her arm became rapidly sore. This condition was protracted with her until the 7th of February. On that day she was delivered of a dead child.

The same evening about 20 pustules appeared scattered over the feet, chest and thighs. She felt so well the next morning that she could not be kept in bed. No scars were left.

The rest of the household were vaccinated the same day with the same matter. I diagnosed the fever having commenced 24 hours before in Henry's, Jim's, Mary's and Martha's cases

Their arms became rapidly sore. Mary had two or three pimples on her face; none anywhere else. Jim and James had about twenty pustules each over arms, thighs and body. Martha two pustules on her face, and one on bottom of each foot. The "initial fever" in the case of Jane James, also pregnant, had not commenced longer than the day before. Her arm became sore rapidly; she never complained at all. No sign of eruption appeared, and in five months she gave birth to a healthy child. Tom Baltimore, I thought, had been under the influence of the initial fever about one day and a half. His arm became sore, and two pustules appeared on his face, but nowhere else. It must be borne in mind that none of these persons, except Charles, had ever been vaccinated, and Charles was vaccinated thirty years before. Charles recovered as well as could be expected, but is terribly "scarred up."

These cases I term *manipulated* cases of small-pox. I never in my life saw a more malignant case anywhere. I think I saved Charles' life by withdrawing all internal remedies during the secondary fever.

I should state that this house had only one room, and the inmates were unusually poor and shiftless, even for colored people; the cooking, washing and everything else to be done was done in this room. I seriously believe that had they been treated by the most *skillful* physician, upon the common and accepted plan, every one of them would have died—such was the want of good air and cleanliness in this poor, afflicted family.

On the 26th day of January, 1873, I visited Mr. M's family, consisting of himself, his wife, five boys and three girls, and three colored servants. In feeling each of their pulses, as is my invariable custom, for the purpose of seeing the state of the circulation, whether the pulse is sluggish or not, I was utterly amazed to find the pulses of two of his children had the pathognomonic sign, whilst the rest of the family were free. I said nothing, but gathered from him that these two children stayed in the kitchen a great deal. When I went to the kitchen I found the cook with the same peculiar pulse, and the other two servants free. I learned that the cook and the two children were *malaising* for a couple of days with sore arms—very early—commencing the next day after the vaccination; then had recovered without a sign

of eruption, whilst the rest (although they all took and had sore arms) did not complain until eight or nine days after the vaccination. I afterwards learned that this cook was a daughter of my very sick patient, Charles Gaines. Then it was plain to me, although she protested she had not been to her father's house for more than a month, that she fed her father's family at night from the best Mr. M's table afforded. No eruption in any member, white or colored, of this family.

On the same evening, the 26th, I visited Mrs. A's family, consisting of herself, two daughters, a little boy, her aunt, an old gentleman, and three colored servants. On feeling their pulses, I found the little boy, strangely enough, had the *peculiar pulse*. I vaccinated all with the same vaccine matter; but his arm became rapidly sore. There was *malaise* for two days, then recovery without eruption. I found, on the 1st, all the rest had the peculiar pulse. The first vaccination failed to take with any but the little boy. I re-vaccinated them, and in the shortest time imaginable they all had sore arms, *malaise* for two days, and recovery without a pustule.

The family at the hotel—nine in number—3 men, 4 girls, an old lady, and a boy—had been vaccinated on July 13, and again on January 24th (apparently with tolerably good scars resulting), without any effect. They were exposed to small-pox on the 28th of January. On February 2d, all gave the sign of the commencement of the "initial fever." They were re-vaccinated on this day, and the arms became rapidly sore, *malaise* continued for a day, and then recovery without any eruption.

My own family, consisting of my wife, three children, my wife's brother and sister, and three colored servants had been vaccinated in 1863, with good scars, and had been repeatedly vaccinated during the past month without the least effect. They were exposed to small-pox on the 28th of January. On the morning of the 2d of February, the "initial fever" revealed itself in all their pulses. I re-vaccinated them; their arms became rapidly sore. There was very slight malaise for two days, and convalescence was established without any eruption.

On the 11th day of February, 1873, Dr. B. called upon me. During our conversation, he asked if I thought the old lady died with small-pox. My reply was, that her symptoms were very

good small-pox symptoms, but the eruption does not come out until the fifth day, and a patient with variola nigra dies from the first to the fifth day. He then remarked, he saw a child of J. H., a colored man, several times, but supposed it to be simply a case of worms, but now it has a skin eruption. In compliance with a request from the doctor, I at once visited the child with him, crawled into a miserable little cabin, about 6 feet by 8, with a dirt floor, and found a child about five years of age, with as bad a case of confluent small-pox as I ever saw around the wretched slums of New York city. I vaccinated this colored man's wife and three children, and also his brother's family, consisting of wife and four children. But as there was no "initial fever" in the pulse of any, I rode down again two days after. The peculiar pulse, the pulse *sui generis*, was unmistakable in all. They were vaccinated again; the arms became rapidly sore, indisposition for a day or so, and then recovery without any eruption. The confluent case recovered with the loss of one eye, from opacity of the cornea.

On the 31st of January, at the request of James Poles, I called at his house to see his little daughter and his wife, both in the last stage of consumption. Poles' house, be it remembered, was the house at which the man died on the 4th of January. His family consisted of himself, a daughter, two little boys, and the sick girl and sick wife. The boys and the girl showed that they had had small-pox in the *discreet* form, whilst Poles himself had evidently had varioloid. There was not vitality enough in the consumptives to get up a case of small-pox, and they had escaped entirely.

Whilst I was at this house, Arthur Grigsby, who occupied the up-stairs of Poles' house, came down, and said he had lost a child very suddenly this morning from worms; "they had fairly ate him up." After a time he added, "I wish you would go up and see if you think the worms killed him." I started, and had got half way up the steps, when I halted and said, "you have got small-pox up there; I smell it." I went in, turned the sheet down from over the face of the corpse, and there lay a little boy, who was dead of variola nigra, of Sydenham, the bloody small-pox of Mead, and the malignant small-pox of other authors. His wife was terribly *pitted*, she said from having the disease

three years before in Washington city. I vaccinated Grigsby and the two little boys—the initial fever having commenced in all; their arms became sore, *malaise* set in for one to two days, and recovery without a pustule. I then, for the first time, drew a long breath.

I now learned from Grigsby that the colored man, George Green, came from Washington city, was on his way to Flint Hill, Rappahannock county, Va.; being an acquaintance of Poles, he stopped at his house all night. The same night his disease broke out. I learned that on his way to Poles' house he stopped at Markham, took a drink at the bar of the hotel, shook hands with Bettie Wilson—W. J. being in the bar-room at the time. Visiting was going on all the time between Poles' house and Gaines', and between Gaines and the Haleys.

No one who read my report to the Medical Society of Virginia, annual session, 1872, can fail to see that I there hint at what I boldly assert in this paper. I wish any one who may be interested to refer particularly to that part of the paper on small-pox which speaks of the disease as it occurred in the families of Mr. F. and Mr. W. Thirty cases at these two homes were all unprotected, save one young lady, who had been vaccinated and had a very large scar. Twenty-nine were vaccinated after commencement of the initial fever, and the twenty-nine arms became rapidly sore, *malaise* occurred more severe than common for two days, and recovery without any eruption. The young lady with the big scar, and who was not vaccinated five days after, had the disease in the confluent form. The young lady from whom they caught the disease, died with it a few days after reaching home.

Let us suppose a house located in the middle of a large prairie, and we see the grass burning at a distance, but the flames bending straight in the direction of the house. Would it not be the most sensible thing we could do to fight fire with fire; and, starting a counter-fire, burn the grass around the house, so that when the approaching flames reached the ground burnt over, the fire would have to stop for the want of combustible material, and save the house? This is just what I propose to do in treating small-pox. I would recommend isolation, and giving the small-pox to all near by, and likely to be exposed to its direful influences. Visit the parties twice a day, and as soon as the fever of

inception is recognized, vaccinate them, and the disease must stop for the want of material to feed upon. Grant me that the pulse is pathognomonic in small-pox, and it seems to me that we are over the most *incomprehensible* part of our subject.

I am happy to say, in this most *essential* respect I am fully corroborated by that learned and indefatigable investigator, Dr. J. S. Conrad, late Professor of Theory and Practice of Surgery in the late Washington University of Baltimore, Md., and Resident Physician of the Marine Hospital, Baltimore, in a paper on small-pox read before the Medical and Chirurgical Faculty of Maryland, 1874. On pages 6 and 7 he says: "The pulse to an educated finger is pathognomonic and significant, and yet words are scarcely competent to describe the peculiarity of the beat, or impart its character to others. In one case—the only one accompanied by other signs or suspicions—it was a guide to diagnosis, when there was not otherwise the slight probability of variola being the disease in question." In a note at the bottom of page 7, he refers to my report on the same subject in the *Transactions of the Third Annual Session of the Medical Society of Virginia*, 1872.

As I have repeated my experiments in more than a hundred cases, running through a period of thirty-four years, with *entire* success, and as I find myself corroborated in the most essential points by Professor Conrad, I think I have made out a case of sufficient interest and importance to cause medical men to repeat these experiments, and to note results of their researches for themselves, giving to the world the benefit of their labors. I said in my report of 1872, already alluded to, that if persons, who have already taken the germs of the disease in their systems, be at once vaccinated, they come very rapidly under the influence of the vaccine matter. I will now add, if they are vaccinated in ten or twelve hours after the commencement of the *initial fever*, they will be indisposed from one to two days, but will show no sign of any pustule or eruption, and the parties will be as perfectly exempt from a subsequent attack as they would be after having the disease in the most malignant form. If the vaccine matter is any account, has any vitality at all, it never fails to take.

As hauling around to the hospitals, pest-houses, &c., is the

most prolific source of spreading the contagion abroad, each case should be isolated and treated where it is taken. Let every one be exposed to the disease who is near by as soon as possible, and as soon as the pathognomonic pulse is recognized vaccinate him. If this is promptly and effectually done, the disease is obliged to cease for the want of material to feed upon.

For the treatment of small-pox I will say nothing here. I refer all who may be interested to my report to the Medical Society of Virginia in 1872; only I strongly recommend the entire withdrawal of all internal remedies during the secondary fever. It is the nature of the disease; it cannot be prevented, and had best be let alone. I know I have saved the life of some by following this plan.

Seeing how wonderful the effect of the vaccine virus is in modifying the severity of the disease, it is my habit to put a little good, fresh matter in the system every day, if there is sound skin enough to be found on the arms or thighs for the purpose, and I think it is about as good for the sick as any dose of medicine I give them. The best matter is taken from the arm of a healthy, rosy little girl, between the ages of two and five years, about two to three removes from the cow. I would not convey the impression that I never use deodorizers; I use them all very freely. Of the disinfectants, I like bromo-chloralum the best. I always carry a bottle of creosote in my vest-pocket; it is very invigorating to smell it occasionally, and enables me to stand the sickening and debilitating smell of the disease better.

Dr. Conrad's paper is an exceedingly valuable one. I would advise every physician to read it.

In the malignant form of the small-pox, as it occurred in 1873, I can only say that all the cases under my management recovered, and nearly all that were not under my control died.

In regard to the prevention of pitting, carbolic acid and glycerin mixture is a very good application; but I doubt if anything yet proposed is better for this purpose than the old carbonate of lead and linseed oil.

ART. II.—*Physicians are not Infallible!* By R. L. PAYNE, M.D., President of the Medical Society of the State of North Carolina; Member of the North Carolina State Board of Medical Examiners, etc., Lexington, N. C.

The medical science, is not yet a science complete and perfect in all its parts, nor can it ever be while there are so many shortcomings and absurdities prevalent among its votaries.

The truth is, as a profession we have many very glaring faults, and it becomes our solemn duty, as honest men, to seek them out, look them squarely in the face, and make every effort to eradicate them.

Then, although I do not wish to be considered a croaker, I beg leave to mention what I conceive to be a few of our defects; and if my remarks smack in the least of cynacism or satire, I know the fraternity will pardon me when I assure them that I claim no special exemption for myself, but freely acknowledge that I am, to a large extent, *particeps criminis.*

How often is it the case that we permit our own hobbies, pet theories and particular ideas to run away with sound judgment and common sense—that particular kind of sense which the celebrated Wirt used to speak of as the most uncommon sense of all.

Prominent among our faults is the *spirit of fanaticism!* I know that it has been said, that a certain amount of fanaticism is necessary for the attainment of any great end; but this can only be true where it is expended in the right direction; and unfortunately, time has shown us, that it has not always been so expended in our profession.

For instance: only a few years have elapsed since large numbers of us went entirely crazy upon the subject of hypodermic medication. For several years the hypodermic syringe was used to so great an excess that every square inch of the human skin was made to feel its sting. Many practitioners in their blind zeal even forgot that any of their patients had any such thing as a *mouth* or a *rectum.* But water will always find its level; so will many other things; and now the hypodermic syringe, like the lancet, is regarded as an exceedingly useful instrument

when judiciously employed, but is not thought, by any means, necessary in every case of disease.

Again: What splendid achievements have been gained in the field of gynæcology! McDowell, Atlee, Sims, Thomas, Wells, Hewitt, Barnes, Battey, and a host of others, have rendered their names immortal—have absolutely climbed the highest "steep where fame's proud temple shines afar." But, alas! under their leadership, abdomens are now split *ad libitum;* and wombs are cut and slashed *ad infinitum*, by doctors *ad eundem*, who "lay the flattering unction to their souls, that it is all accomplished *secundem artem.* Sangrado and Rush, in their palmiest days, were never more infatuated with the lancet than are many in this day with the gynæcological bag, and one grand result of it all is this, we have a *great many crippled women!*

Do not understand me as under-valuing the benefits to be derived from the practice of gynæcology. Not at all. I do a little work in that line myself; but the older I grow, the more am I persuaded that there are other folks besides children who "should never play with edged tools."

Opposed to these are those who decry the use of all instruments, and rely with implicit confidence upon the "*tactus eruditus*" alone! These wonderful doctors have very astute, innate powers of perception; in truth, are "born doctors," and some believe, have invisible eyes in the ends of their index fingers, since they profess to treat all the diseases to which poor woman is liable, scientifically without the aid of the speculum! Many of them are really of the opinion, that Satan has done more to furnish the profession with an efficient speculum, than either Ferguson, Cusco, or Sims; and as Sims is the inventor of one of the best of these instruments, they very naturally suppose that he must be one of the most potent and active vicegerents of the aforesaid majesty! They say you may examine a woman with the finger, but if ever you touch her with the speculum, she is *demoralized* beyond the power of redemption; and those of them who agree with Darwin, are fully of the opinion, that if it had not been for Sims, *et id genus omne*, we would long ago have been blessed with sons having true *cyclopean fingers!*—no sham fingers like their own, but *genuine visible one-eyed* fingers made expressly for the business!

Again, among obstetricians there are very many in this day who resort to the obstetric forceps in almost every case of labor, be it natural or not. They are perfectly willing to give nature a fair chance in any case of disease, with any pathological condition; but are too restless and impatient to give her a fair showing in the physiological process of a natural labor, unless she brings the baby very speedily—one might say by the express train. *O, tempora! O, mores!* How they have changed! *Patience* used to be considered one of the cardinal virtues of a good midwife; but now if he ever gives the baby time enough to be born by itself—that is without the aid of instruments—he is considered *recklessly rash!* The consequence of this radical change in obstetric practice, is this: In our day, many a poor child is, "untimely rip'd from his mother's womb;" and if the statistics of all labor cases were faithfully kept, and as faithfully reported, we would see, as the legitimate result of this *fanatical haste*, a large increase in the number of dead babies, lacerations of the perineum, lacerations of the external uterine mouth, vesico- and recto-vaginal fistulæ, etc. If Paul Chamberlin could have foreseen how recklessly, and often how unnecessarily, his instrument would be used in this glorious age of progress, beyond a question he would have beaten his metal "into a plowshare or a pruning hook" instead of made an obstetric forceps.

Only three nights ago, I was called to a lady in her third labor, who informed me that her two older children had been delivered by the forceps. The forceps were applied in both cases before she had been in labor four hours. She had no untoward symptoms, but her physician told her that he used the forceps owing to the fact that her "bony pelvis was too small." Upon examination, I came to the conclusion that her pelvis was sufficiently roomy, and in two hours and a half after her first pain, she gave birth to a fine, lusty, ten-pound boy, without any foreign assistance, except that which was applied to the perineum.

I knew a physician who practised midwifery very successfully for forty years, and yet, who never resorted to the forceps in a single case; and although I have found the instrument very frequently useful in my own practice, and regard it, when judiciously used, as a conservator of both mother and child, still I believe they are resorted to much too freely in our day. I am persuaded

that a great many female troubles flow directly from this cause, and also from the reckless use of other obstetric instruments.

I know, it is said that vaginal fistulæ are most frequently caused by long continued pressure of the child's head, etc. This is doubtless very often the true cause; but in a large practice among women, I have never seen a case of vaginal fistula except after the use of the forceps, or some other instrument.

In this connection, I might mention the use of chloroform in cases of perfectly natural labor, and might speak of the evils which are liable to, and often do, result from it, both to mother and child; but time fails me, and I will only say that I cannot see or apprehend what necessity there is for any remedy in a perfectly natural and normal condition or process. Really I should not be surprised to hear very soon, that some enterprising brother had recommended chloroform in natural defecation! Why not? To be sure, with our present light, no one should be allowed to *suffer any pain* while we have anæsthetics! Of course, then, it would be a most valuable remedy in dys-chezia, and he would certainly be a benefactor, and would immortalize himself who could secure to the whole human family universal *eu-chezia!* Somebody please test the thing; and we promise not to call him a hum-bug, or any other kind of a bug!

Again: at this particular time we find many of our profession who attach undue importance to the benefits which are to be derived from the use of the thermometer. The poor patient must "go through a regular course of sprouts"—must be victimized! First, they stick the instrument into his mouth, then under his arm, then upon his body, then into his rectum, and sometimes the use of it is exactly *vice versa*—the mouth coming last. Consequently, we do not wonder that a poor fellow not long since in one of our hospitals, thought that it "did not do him as much good, when placed under his tongue, as it did on a former occasion, because it did not taste like it did then," and we must allow that he was correct, since "*de gustibus not est disputandum.*" The thermometer is certainly very useful as an aid both to diagnosis and prognosis; still no one can doubt that there are a goodly number of most excellent practitioners who have never used it, and whose success in the treatment of disease will compare favorably with that of any other man. Therefore, let us keep cool on the subject.

I am surprised that such a liberal set of fellows as we are, should ever quarrel over our nomenclature; consequently, I cannot fully understand why many of us object so seriously to the word "sthenic," as applied to disease. They say that the biotic force is always impaired, never rendered more active by disease; that all disease, when compared with the normal standard of health, must be a departure downward, and therefore must be asthenic. Taking it in this light, I fully believe it; but when comparing two cases of the same disease, I think we may still safely employ both terms, and I think there will always be a necessity for them, as long as the natural constitutions of men and the causes of disease differ.

The following case is to the point: Some years ago, a very stout, full-blooded old gentleman in my county, owned a very valuable and very vicious jackass. One day the ass caught the old man's arm between his teeth and bit it most severely. The muscles were contused and lacerated in a most shocking manner, and the result was a very acute inflammation of the most active type. Now I thought this was a sthenic inflammation, but there were some who insisted that it was asthenic, and I compromised with them by admitting that, as the natural result of the bite of an *ass*, *it possibly might be ass-thenic.*

As soon as the old gentleman was able to walk, he took up his gun and muttered out the words, "Old ass, I'll fix you." Then he walked to the stable, put his gun through a crack and sent a ball through the brain of the animal. There were some strange opinions entertained as regards the death of the ass. While some thought he died from a ball through the head, others attributed his death to *as*phyxia, because they heard the old man say, "Old ass, I'll fix you!"

It is really amusing to see how timid some doctors are! There are many who are so much afraid of losing one drop of blood, that they would have us apply Esmarch's bandage before we extract a splinter or remove a wart.

They are beginning to look upon the transfusion of blood as a panacea for all "the ills which flesh is heir to," and those among them, who are extremely restorative in their views, would invariably use for this purpose the blood of an elephant, were it not for a secret fear entertained by some, that it might give rise to *elephantiasis!*

Thus I might go on at much greater length, showing our proneness as a profession, if not to absolute fanaticism, at least to such extreme enthusiasm as amounts to folly; but I have said enough to point out some of our absurdities. We all know full well that from the days of Hippocrates down to the present time, the vessels which have contained men of extreme views, have all been wrecked upon the rocks of Scylla, or have been swallowed up by the whirlpool of Charybdis; and yet many of us in this day have hastened into another boat with "Young Physic" which is not seaworthy and needs ballast, and in consequence must go down. O, for a little more moderation, a little more true conservatism in medicine!

Is it not possible for us to pick up men enough from these wrecks to man another boat, and then with the patience, the prudence, the experience, the good sense and sober second thought of all combined for ballast, may we not hope safely to weather the storms which must assail us upon the great ocean of professional life?

ART. III.—*The Hypodermic Syringe and Some Recent Conveniences for its Use.* By WILLIAM A. GREENE, M. D. Macon, Ga.

Perhaps no subject in Therapeutics has attracted so much attention from medical men during the past fifteen years as the hypodermic administration of medicinal agents; and no discovery for the relief of human suffering has produced such glorious results since the days of Hippocrates, unless it be that of chloroform.

I had the honor of publishing the first article of a practical nature, that appeared in any medical journal in the United States, on this subject. It was published in the *Atlanta Medical Journal*, May, 1866, and it was extensively copied throughout the country. This was followed by an exhaustive paper on the subject, in the *Richmond and Louisville Medical Journal*, during the following Spring. I have continued to give the profession the benefit of my experience with the hypodermic syringe from year to year since that time—the last paper being

"A Practical Talk about Hypodermic Medicine," published in the *Richmond and Louisville Medical Journal*, January, 1876. It will be remembered by those who have read my articles that I prophesied in one of these first papers, that "in *ten years* the hypodermic syringe would be the pocket companion of every physician in the land, as the thumb lancet was in the hands of our fathers in medicine." I repeated and called attention to this prophesy in the article above referred to in the *Richmond and Louisville Medical Journal*. We all know to-day how truly this prophesy has been fulfilled, as one can scarcely find a doctor without his hypodermic syringe.

Any convenience or improvement in the use of this invaluable instrument is of interest to the profession. We are well aware of the trouble and annoyance of preserving fluids for hypodermic use—to have them always at hand in a condition to be applied—as well as the danger of introducing air under the skin at the point of insertion of the needle. Various appliances have been devised from time to time, both by physicians and instrument-makers, to overcome these serious objections in the use of the instrument. But none have stood the test of experience.

Not long since I came in possession of a most ingenious little fixture which seems to overcome every objection. It is known as the "air-tight hypodermic medicine bottle," invented and manufactured by Messrs. Geo. Tiemann & Co., of New York, of which the following is a correct wood cut, kindly furnished me by this enterprising house, to accompany this article.

As will be observed, it is a small, graduated bottle, so arranged that it is hermetically sealed by means of a hard rubber stopper. When the syringe is to be filled the nozzle is placed in the *side* hole of the stopper; the glass is then turned up and rotated until it stops. Communication between the syringe and the bottle is now open. Draw the piston back and the liquid follows, without any admixture of air. Turn the glass back again and the bottle is hermetically sealed or closed. To fill the bottle, turn the stopper half way round, and there being a *slot* or indenture, it is easily pulled out. The bottle is arranged both for the sliding and screw syringes. The price is only 75

cents for a single bottle. A complete "armamentarium hypodermicum" can be perfectly arranged by putting a dozen half-drachm bottles of this kind in a neat leather case. A place is fixed for the syringe, or it can be carried separately in the vest pocket.

The following are the solutions I have found, from a very extensive experience, to be the most useful in cases of emergencies, and should always be on hand carefully prepared and well preserved:

Morphia sulphate, twenty-four grains to the ounce of water.

Morphia and atropia, twenty-four grains of the former and one grain of the latter to the ounce.

Sulphate of atropia, two grains to the ounce of water.

Sulphate of strychnia, two grains to the ounce.

Squibb's fluid extract of ergot.

Hydrochlorate of quinia, each minim containing one-quarter grain.

Chloral hydrate two grains to the minim.

Strong solution of ammonia (invaluable in many cases.)

Squibb's fluid extract of aconite.

Squibb's liquor opii compositum.

Apomorphia for producing emesis promptly, when the patient cannot swallow. This remedy should be remembered, and always ready for use. It is destined to work wonders, after more extended use and when better known.

I often find physicians with their hypodermic syringes out of order—the most frequent trouble being the clogging up of the needle, or the piston too small and dry. Always after using a syringe, when about to replace it in the case, draw a few drops of water or glycerine into the barrel, and let it remain, so that when it is needed again, even if a month intervenes, it will only be necessary to throw out this water or glycerine when the *piston* will be tight in the barrel and will work as satisfactorily as when new. Oil the piston occasionally.

For cleaning the point or needle after using, draw into the instrument and throw out a little alcohol (a vial of which every physician should carry in his case) two or three times; then detach the needle from the syringe and blow out with the mouth what may remain, and then draw the little wire a few times through

the needle, wiping it off each time by drawing between the finger and thumb, and *replacing* the wire, to remain in the needle. By observing these simple rules, a syringe will always be in good order and ready for immediate use.

The physician should be careful there is no air in the barrel between the point of the piston and fluid, when using the instrument—as the needle may have penetrated a blood-vessel; the injection of a globule of air would be dangerous to life. Any one can easily expel the air by reversing the syringe (turning the instrument, needle in place, with the point up); then press gently on the piston until every bubble of air has passed, and a steady, clear stream emerges from the point.

I should have stated, that all hypodermic solutions which are expected to remain long on hand, should be prepared with *chloroform water*, as then they keep *indefinitely*.

There are a variety of hypodermic syringes offered for sale; but I have found none equal to the "graduated glass barrel with bi-fenestrated metal guard," manufactured by the celebrated instrument makers, Geo. Tiemann & Co., and fully described in my article, "A Practical Talk about Hypodermic Medicine," before referred to. I am to-day using one I have had for eight years, and it has never been out of order. I have air-tight hypodermic bottles which may be used for ordinary purposes in pocket medicine cases, as the stoppers never get out of order, nor can they be broken, and neither are they affected by any liquids carried in pocket cases. In fact, these little vials are ingenious, and I have found them exceedingly useful and convenient.

ART. IV.—*Use and Abuse of Obstetric Instruments.* By E. M. CAMPBELL, M. D., Abingdon, Va. (Read before the Abingdon Academy of Medicine, February 5th, 1878, and published by request of that body.)

The subject of labor and its management is to me the most interesting in the practice of medicine and surgery. When we think of who it is that has to endure the pains of labor, and when we witness her suffering and agony, and see the anxiety of her friends, and then again reflect upon what may be the result of

the delivery, we would, indeed, be insensible, if we failed to be impressed with the magnitude of the responsibility which rests upon us as medical attendants. The fact that the agonized one is she who gave us our physical existence! aye! and more, gave birth to the Saviour of man, whereby it was put in the reach of all future generations, to be redeemed and saved from their sins, cannot fail to make upon the casual observer a strange impression, and create with the physician a feeling of anxiety, apprehension and responsibility that is appalling.

But, notwithstanding the anxiety felt and the suffering witnessed, we must recur to the fact, that labor is a natural process, which generally terminates favorably; and those cases requiring instrumental interference, are only exceptions to the general rule. It is only in unnatural labors (sometimes caused by disease, acute or chronic), or in cases where there is deformity of the mother, or where there is malformation of the child, which causes the use of instruments to become necessary, or even justifiable.

Obstetric instruments to facilitate delivery (though often in very crude form), have been used by obstetricians for a long time; but it was reserved for a native of the British Isles to so perfect an instrument as to make it a real aid in difficult labors. Modern science and improved mechanic skill have so perfected the instrument, and have so developed and explained the principles upon which it is based, as to make it indispensable in obstetric practice. It must be apparent that the necessity which causes a resort to the use of an obstetric instrument is an unfortunate one; but the necessity will sometimes exist.

Dr. Blundell, in his *Lectures on Midwifery*, uses this strong language in regard to obstetric instruments: "All obstetric instruments are evils; every additional obstetric instrument I think is an additional evil. He is an able *accoucheur* who contrives a serviceable instrument; but he is an *accoucheur* still abler who teaches how to dispense with it." He further expresses the opinion, that "upon the sex, the effect has proved a curse rather than a blessing."

The instruments now used in obstetric practice are but few, namely: The forceps (long or short), tractor, perforator, crochet, blunt hook and craniotomy forceps; and I will add the scalpel

because sometimes, to rescue the mother from certain death and save the child, the Cæsarian section is the only resort, and it cannot be performed without a knife. These instruments are divided into two classes—the mother's and child's instruments, or the embryospastic and embryotomic. The embryopastic instruments are for the purpose of abstracting the fœtus without injury to the mother or child; while the embryotomic instruments are for the purpose of facilitating labor, by reducing the size of the fœtus.

Of all the instruments used in obstetric practice the forceps most commends itself to our profession, to science and to humanity. The forceps is an instrument of modern invention, and was for a time held in secret by the inventor. It was invented about the beginning of the year 1647, by Dr. Chamberlin, of England, and used and held as a secret by him and his sons, who were also doctors, much to their pecuniary gain, but greatly to their prejudice as men of science and philanthropy. The crude instrument they first used has been greatly improved by modern mechanical skill, but the principles upon which it is based are the same now that they were in 1647, and are likely to remain so to the end of time. I am decidedly of the opinion, Dr. Blundell to the contrary notwithstanding, that the invention of the forceps was a great boon to the best part of humanity. In skillful hands, directed by a clear head and a pure heart, the forceps have extracted pleasure from agony, cheerfulness from despondency, and hope from despair.

In considering a question of this sort, we should not be controlled entirely in our opinions by immediate results, but should consider the immediate and then the ulterior effects produced. At first the pregnant female is horrified at the thought of having to submit to the use of an obstetric instrument to aid in her delivery; but upon more mature deliberation she concludes that she has a guarantee that she will be safely conducted through her labor, if necessary, by means of the instruments, the name of which was so shocking to her a short time before.

In looking about for reasons to influence us in regard to the use of obstetric instruments, we must not overlook the character and the mental condition and nervous construction of woman. As a general rule, woman are formed with a finer organized ner-

vous system, quicker mental perceptions, and more sensitiveness of character than men. All these constituents go to make up womanly character, her fancies and her prejudices.

It is evident to my mind that there is a growing tendency among females to escape child-bearing, the chief reason for which is, I think, dread of the suffering and apprehension of the result of labor. And but for the fact that the skilled *accoucheur* is standing by with forceps giving assurance of a safe delivery, the horror of child-bearing would be greatly increased, and the resistance to it would greatly diminish production. However, the danger from childbirth is very small, and the cases requiring the use of obstetric instruments almost infinitesimal. When we examine the reports and observe the statistics, we are almost compelled to be surprised at the exhibit.

I set out with the proposition that interference by the doctor, in cases of labor, with or without instruments, was rarely necessary. The excessive anxiety of friends, the solicitude of the woman, and the nervousness of the *accoucheur*, all combine to urge the physician, and tend to make him interfere and many times improperly. The statistics of the hospital over which Madame Boivin presided, shows that out of 20,570 cases of labor, only 334 required interference, and without the statement being made, the inference I draw from the paper is, that a very small proportion of the 334 required instrumental interference. The table shows that but one in sixty-one required aid, much less instrumental interference. Reports from other hospitals, and the experience of private practitioners, all go to confirm the truth of the report from Madame Boivin, and shows that there is but slight call for instrumental interference in labor.

After doing a pretty large obstetrical practice for twenty-nine years, my own experience is that the use of instruments in labor is but rarely necessary. I have not kept a record of the number of cases of labor that I have attended, nor of the number of times I have had to resort to the use of instruments to aid delivery; but I cannot recollect but three cases in which I thought the use of instruments indispensable.

In one case, the instrument used was for the purpose of reducing the size of the fœtus, the mother being deformed, and it had been ascertained in a previous labor that she was incapable

of giving birth to a fully developed child; besides, it was perfectly clear that the fœtus was dead. In the other two cases the forceps was used, and in one of them with the happiest result, saving both child and mother. In the other case, the mother was relieved of intense suffering, but the child was still born, because, I think, the resort to the use of the forceps was too long delayed. From my own experience, I am inclined to agree with Dr. Blundell, that obstetric instruments are an evil; but I must add that in extreme cases they are a great boon.

I am clearly of the opinion that instruments are often used, when, if nature had been permitted to take its course, the result would have been equally satisfactory, without the danger which always attends instrumental delivery.

Let us inquire what are some of the evil effects of instrumental interference in labor. First, the woman is shocked and horrified by the idea that instruments have to be used to preserve her life and that of her offspring. She is shocked because she is apprehensive that her suffering will be increased, and again, because she is fearful that there may be exposure of her person to the idle gaze of the persons around. And I regret to say that such aprpehension is not totally without foundation.

But there are other abuses to which obstetric instruments are liable which are more serious. The danger of rupturing the perineum, of injuring the rectum and producing rectal fistula, and of injuring the bladder, and thereby causing vesico-vaginal fistula—all of which tend to make life to the refined and sensitive female a burden, and which was a burden to a large number until the genius of J. Marion Sims removed the difficulty, and showed to the world that it was in the power of the medical profession to entirely remove this evil, or at least greatly lessen it.

There are other objections to obstetric instruments which, to my mind, tend to show that their abuse goes far to counterbalance their use. The *accoucheur* becoming wearied, his patience exhausted, the woman complaining excessively, friends imploring him to interfere, and urging him to extract the child, his instruments at hand, cause him to yield to their desires. He attempts to use forceps and fails, and then he resorts to Smellie's scissors and sharp hook, and speedily terminates delivery, by the destruction of the child, as it was my misfortune once in

consultation to witness, to my great horror. The *accoucheur* asseverated that the child had been dead for hours, but it turned out that, though half the brain had been evacuated, the child came into the world breathing; the woman made a good recovery, though her mother and sister had both died under similar circumstances. I still think, if no instrument had been present, the woman, in all probability, would have given birth to a living child, though probably at the expense of a ruptured perineum.

But, on the other hand, many children have been preserved by the use of instruments skillfully handled that would have perished without them. I recollect a case, which occurred in my practice about twenty years ago in which I believe that proper instruments skillfully used would have saved the life of the child, and certainly would have shortened the suffering of the woman. The child was the largest I ever saw born. Without, however, at the time, taking the dimensions or weighing it, my impression was that it was twenty-four inches long, and would have weighed twenty pounds. This sounds like extravagance, but I still believe my estimate is not far from right. In this case there was no difficulty, except the immense size of the child, which caused the delivery to be long delayed. After the head was born, it seemed that the shoulders could not pass, and delivery was not completed for four hours, and then, by means of a fillet, made out of one of my legging strings, passed under the axilla, and after much labor the child was extracted still-born. In this case, if the forceps and blunt hook had been present, the woman could have been prevented much suffering, and the child might have been saved. The conclusion I draw is, that the invention of obstetric instruments is a marked advance in medicine, and in skillful hands are a great boon to women, and when directed by a high moral sense they tend to elevate morality and christianity, instead of lowering them.

To Prevent Pitting in Small-Pox.—Semaria recommends that the suppurating pustules should be first pencilled with glycerin, and then thickly spread over with a powder consisting of four parts of sulphur and one part of red precipitate. After the crust thus formed falls off, not even a cicatrix remains.—*Gazette Medic. Ital., Lomb.*, 44, 1777—*The Clinic*, Feb. 9, 1878.

ART. V.—*Treatment of Diphtheria.* By C. D. PARKE, M. D., Selma, Ala.

As I cannot call to mind a single article read by me in any medical journal for several years past relating to the treatment of diphtheria, in which either mopping or gargling is not recommended, I wish to enter a solemn protest against all such proceedings. Gargling is not applicable to very young children, and mopping I can only characterize, apart from its injurious effects, as barbarous; for I can conceive of no more exquisite torture than subjecting a little innocent to the thrusting of a probang into its highly sensitive and inflamed throat. Apart from this, could any one suggest a more effectual plan of undermining the vital powers of a child than each morning and evening, and even oftener, as sometimes happens, to have the little sufferer seized by a burly giant and by main force, in spite of its fright and struggles, subjected to this most horrid infliction? Take the most robust child of your acquaintance, in the full vigor of health, and twice each day subject him to this ordeal, with the resulting strangulation, which is almost sure to follow on account of his fright and struggles, and I defy the most ingenious mortal to devise any means which will more rapidly and effectually sap his strength.

Now for the treatment which, in my hands, has ever brought about the most gratifying results. When called to a case, if the bowels are in a normal condition, let them *severely* alone; if constipated, however, as the only object is to unload them, select any mild cathartic which is likely to prove most agreeable to the patient, *except* mercury in any of its forms, as the accompanying treatment would most likely produce salivation, which should certainly be avoided. I wish to emphasize this word "agreeable" in the above sentence, as I conceive it to be worth any amount of trouble to fall upon some combination by which the leading remedy in the treatment can be taken, not only without disgust, but with pleasure; and I can safely say I have found it in the following:

℞. Chlorate potash.....℥j
Mur. tinc. iron.....℥iij
Syrup, acaciæ and water ā ā.....℥ij—M.

Any one, after the slightest reflection, must be convinced that in a prostrating disease, like diphtheria, when to keep up the strength should be the paramount object, it is no trifling matter when the remedy you wish to use so often and constantly can be given without resistance. Of the above prescription, to a child from one to five years of age, a teaspoonful, undiluted (double the dose for an adult), is given every hour until the diphtheritic membrane commences to detach itself from the parts on which it is deposited, which usually happens in from thirty-six to forty-eight hours—at the same time giving instructions that no fluid shall be taken for some minutes after each dose; for as this is the only application made to the throat, it is thought advisable to have it remain as long as possible in contact with the parts. After this stage is reached, the intervals between the doses can be lengthened, as you may now feel sure that the system is properly saturated by the remedy, and it will only be necessary to keep up its influence. Apart from this, the only medicine employed is sufficient quinine each day to keep the fever in abeyance, not forgetting to insist (and this is a matter of vital importance) that, at stated periods, say every two hours, at least two ounces of good, rich milk must be taken. Most generally, however, you will find no trouble under this head, as the patient soon finds that the milk is taken with much less pain than thinner fluids, such as water. When this is the case, they are allowed to take it without restriction as to quantity, and as we all know that there is no better or more easily digested food than rich, pure milk, we can banish all uneasiness on the score of nourishment when a proper amount is taken by our patient.

As to external applications, if they did not annoy the patient, I could see no particular objection to their use; but experience has taught me, that the worry occasioned by them more than counterbalances any good accomplished. Hence, I have long since abandoned their use. Still if any officious doctress has some infallible remedy which she is very anxious to test, I put them to work, with the distinct understanding, however, that they are to be removed should the patient complain. But I do not now remember a single instance where they were tolerated for any great length of time.

It might be well to add, that where the amount of diphtheritic

deposit is large and its exfoliation from the mucous surface is in full blast, the partially detached portions may excite coughing or interfere with easy breathing. Should such be the case, a soft mop dipped in the mixture the patient is taking, will readily remove these patches without the slightest pain or inconvenience, provided the subject is old enough to understand your object and not resist your efforts.

I have thought it useless to say a word as to the pathology of the disease, for any one with half an eye can see from the foregoing, that viewing it as constitutional, all local treatment is well illustrated by the efforts of the good old housewife, whose home was by the sea shore, who, during a storm, was found industriously sweeping the billows of the broad Atlantic from her portico.

ART. VI.—*Amyl Nitrite as a Cardiac Stimulant.* By JAMES L. MINOR, M. D., Rapidan, Va.

Little need be said in regard to the action of amyl nitrite upon the heart, for frequent experiments have proved, beyond dispute, the vigorous action of that drug upon the centre of circulation—yet experiments may prove interesting, although they may simply illustrate an established doctrine.

A patient who had locomotor ataxia of some years duration, was suddenly taken, while under my charge, from a condition of usual health to that of impending death. There was the hippocratic expression well marked; general pallor, with complete unconsciousness. Respiration was stertorous and irregular. Arterial beat imperceptible at the radial pulse, but faintly recognized at the femoral pulse. The pupils were insensible to light and somewhat dilated. The extremities and exposed parts of the body became cold and clammy. It was decided that nitrite of amyl should be tried, but I confess with no idea of permanent relief, for the patient was too evidently fast approaching his end.

The ordinary method of inhaling a few drops from a piece of muslin was adopted; no effect being produced, recourse was had to a hypodermic syringe, with which three minims were injected. In a few moments the heart responded, as evinced by the appearance of a more natural hue of the cutaneous surface. The pulse was recognized in the radial artery. Respiration became much better. The temperature felt normal, and the patient responded

occasionally to a pinch, which previously passed unnoticed. The effect of the medicine seemed to passed off in about half an hour, when the drug was again administered—this time giving five minims hypodermically. The action was similar in kind, but more vigorous in character than the former dose. The pulse became almost as strong as normal.

The patient lasted for nearly twenty-four hours, during which time amyl nitrite was frequently given. As much as fifteen minims were given hypodermically at one of the doses, when the pulse became incompressible. So long as the vital powers were able to respond the administration of the medicine was followed by reaction which seemed marvelous.

The above is merely one of the factors proving the powerful action of amyl nitrite, and the beneficial result which might follow its administration in certain cases calling for prompt cardiac stimulation.

Clinical Reports.

Two Cases of Spontaneous Evolution. By H. F. NELSON, M. D., Fine Creek Mills, Va.

Obstetrical statistics show that spontaneous evolution of a matured fœtus occurs only about once in every two hundred and fifty thousand cases of transverse presentation. Two cases which may be referred to this head have come under the observation of the reporter. In one, the delivery was effected by nature alone; while in the other, though version was being attempted at the moment, it had little or nothing to do with the delivery of the fœtus.

CASE I.—On the night of 31st of May, 1876, I was sent for in consultation by Dr. J. T. Ballou, of Halifax county, Va., where I was at the time practising my profession. Reaching the house designated, I was met by Dr. B., who gave me the following brief history of the case: About two o'clock that day, he had been sent for to see Mrs. M., in her eighth labor, and on making examination, had found the condition of his patient in every respect desirable. A few minutes after 5 P. M., he had delivered Mrs. M. of a good sized, healthy child, and was awaiting the coming of the placenta, when, unexpectedly, the patient again became the subject of violent expulsive pains. Two or

three of these having followed each other in quick succession, he made an examination, and to his surprise, found the hand of a second child presenting at the vulva; but he was prevented from introducing his hand into the womb by the violent contractions of that organ, which came on spasmodically on the slightest attempt at digital exploration. The pains having been violent and repeated at short intervals, the body of the fœtus had become deeply impacted into the pelvis some time before my arrival.

On making an examination, I found protruding from the vulva the right hand of a fœtus in the prone position, and easily diagnosed, as Dr. B. had already done, a dorso-anterior position with right shoulder presentation. The shoulder was jammed down into the pelvis, and, as well as I could determine—for attempted introduction of the hand into the uterus brought on violent contractions—the head of the fœtus was in an extreme state of flexion towards its left side. On the right side of the pelvis, the hip of the child could not be felt, but its body must have formed an obtuse angle with that arm which was now corresponding with the axis of the pelvic outlet. The uterus still resisted, with great violence, all attempts at version, and the reposition of the protruded arm of the child was simply impossible. This condition of affairs had been maintained for about four hours already, and Dr. B. informed me that the pains were much less frequent and less violent than they had been an hour before; though the irritability of the uterus, on attempted introduction of the hand, and the contractile powers of its muscular fibres seemed not one whit diminished. Mrs. M. had suffered intensely from the first, and anæsthesia had not been resorted to; but she displayed heroic fortitude, and said she could stand anything. My examination had satisfied me that nothing save embryotomy, or preferably, rachiotomy, as recommended by Dr. A. G. Tebault (*Virginia Medical Monthly*, April, 1877), would accomplish delivery, unless complete anæsthesia would abate the irritability of the uterus and allow the introduction of the hand, and then podalic-version.

Dr. B. and I now withdrew to the yard to mature plans for further procedure. Scarcely had we left the house, however, when the nurse summoned us in haste, and, on reaching the chamber, we found, much to our relief, that the child had been born with the exception of the head. The body of the fœtus was now elevated towards the abdomen of the mother, so as to allow the face to pass over the perineum without lacerating it, and in a few moments the labor was completed. The child was of fine size, considering that the gestation had been double, but its asphyxiated condition could not be relieved. There was only one placenta.

Case II.—During the month of July, 1877, I happened to be

in Charlottesville, Va., and on the night of the 14th of said month, saw, with my father, Dr. R. W. Nelson, of that place, the following case of complicated labor:

Sophy, colored, married, young, robust and vigorous, in her second confinement, had come through her first labor without any difficulty. On the Friday previous, July 11th, while standing at the ironing-table, the membranes had broken, and she had gone to bed and sent for a physician, who informed her that she was not at full term, notwithstanding her asseverations to the contrary. During the evening, however, pains had come on quite violently, and she had sent for her physician again. As he could not be gotten, she lay suffering the agonies of unconsummated labor till about ten o'clock Monday night, July 14th, when another physician was procured. This second physician having left an ill child at home, remained with her till about twelve o'clock, when my father was summoned. We reached the house about 2 A. M. on the 15th, and on examining the woman, I found the following condition of affairs: The left hand of a fœtus was protruding from the vulva, so that the entire forearm was visible to the elbow, and it was evident, at a glance, that its vitality had been suspended for many hours. The woman was very much prostrated, but was tossing on the bed and moaning piteously. The attempted introduction of the hand gave great pain, and so firmly was the fœtus wedged in the pelvis, that a thorough examination was impracticable. My diagnosis was a dorso-posterior position, with left shoulder presentation. Chloroform was administered, and an attempt was made to effect version. Before, however, any progress had been made in this direction, under the influence of contractions brought on by the introduction of the hand into the uterus, the fœtus was forced through the pelvic outlet with considerable violence, so that the case seemed to have terminated rather by spontaneous expulsion than evolution. There was, however, evidently an upward movement of the fœtal head, and a retraction of the protruded arm just prior to the birth. Nor can the *spontaniety* of the version in this case be questioned, since, at the time when the evolution took place, the hand of the operator being between the symphysis pubis of the mother and the body of the child only acted as a key to the wedge.

The child was of good size, though the left arm and shoulder were considerably decomposed. The mother made a good recovery.

These two cases are of interest merely from the fact that spontaneous delivery in transverse positions takes place in such a very small ratio to the number of such positions.

Original Translations.

Translations from the French. By J. S. Wellford, M. D., Professor of Therapeutics, in Medical College of Virginia, etc., Richmond.

Gingivitis of Pregnant Women.—Dr. A. Pinard, formerly Chef-de-Clinique d' Accouchement, and M. Désiré Pinard, in an essay written together and published in one of the last numbers of the *Bulletin Général de Thérapeutique*, point out to practitioners one of the numerous modifications impressed on the maternal organism by impregnation, which appears to them to have escaped until the present their attention, viz.: the gingivitis of pregnant women. One of them, having had special occasion to examine every day a certain number of pregnant women, has remarked in almost all cases that the gums were the seat of more or less morbid phenomena. The gums were redder and more congested than normally; they were swollen; the edge of the free border, especially the inter-dental membrane, covered a part of each tooth. The slightest pressure exerted on this edge caused a slight hæmorrhage. At a more advanced degree, the teeth lost their solidity. The mastication, at first injured, became more painful and more difficult as the lesions were more pronounced.

This observed fact and its connection with pregnancy as the essential primordial cause, having been well established, MM. Pinard have investigated what conditions might become the exciting causes of this condition. They have examined, with this view, seventy-five women. In the seventy-five women, they have found that forty-five times the gums were diseased.

The occupations of these women did not appear to them to have any influence—any more than the place of birth or the length of their residence in Paris. As to the condition of primiparity, or of multiparity, they observed the following: In these seventy-five women, forty-three were multiparæ; thirty-two were primiparæ. In the forty-three multiparæ, thirty-one had diseased gums. In the thirty-two primiparæ, the number of women attacked with gingivitis was only fourteen. Whence it appears to result that the multiparæ were much more exposed to this affection than the primiparæ, which would otherwise be most natural.

It is proper to say that if this gingivitis has been sometimes observed in women presenting all the attributes of strength and health, most frequently it appears in women whose general state left much to be desired. To satisfy themselves that this gingi-

vitis was really due to the pregnancy itself, and not to foreign circumstances, MM. Pinard have inquired if, in the wards of other hospitals, where sick women, not pregnant or recently delivered, were treated, they might not find the same affection. This examination has given them negative results. Finally, inquiring whether this affection was peculiar to the female hospital population, they were convinced that it is also encountered in private practice.

According to the observations of these gentlemen, the affection most frequently commences towards the fourth month. After having caused trouble, more or less pronounced during the course of the pregnancy, it disappears a month or two after delivery, but it is prolonged much longer with nursing women.

After many therapeutical trials, if not ineffectual at least insufficient, made with different agents of antiscorbutic medication, and particularly with the tincture of iodine, tannin, chlorate of potash, &c., MM. Pinard have settled on the use of a solution of chloral, which has given them the best results in the following formula:

Hydrate of chloral and tincture of cochlearia officinalis (common scurvy grass) equal parts. This solution was applied every day, or every two days, to the free and diseased edge of the gums by the aid of a mop. This dressing was slightly painful, and the cauterization very light. The white and very superficial eschar disappeared generally twenty-four or thirty-six hours after the application. In thirty women attacked with gingivitis, who were subjected to this treatment, twenty-five were cured in less than fifteen days. In two of them the cure was slower, complications having supervened which necessitated the use of ointments with mercurial ointment. In the five others the treatment could not be continued.—*L'Abeille Medicale*, No. 2, January 14, 1878.

Proceedings of Societies.

RICHMOND ACADEMY OF MEDICINE.

(Reported by the Secretary, Dr. Chas. S. Brittan.)

January 15th. **Opium Habit.**—Dr. L. B. Edwards thinks that some attention should be given to this subject. Recently he has met with three cases of opium habit—all ladies, and occupying prominent social positions. One of them is somewhat remarkable in that the young lady, about 23 years of age, is subject to opium *sprees*, as distinct from the habit. She has been as long

as ten months without taking any opium, and during these intermissions, she most generally has no desire for it. She will get on an opium spree of about a week or ten days' duration, will suffer as much as one who is the subject of alcoholic delirium tremens, and will then go an indefinite time without even a desire for more of the drug. The temptation to resort to the drug is generally excited by dysmenorrhœal pain. The habit was begun with a physician's prescription, and what was worse, when she was anxious to do without it, she found after a long while that her physician was continuing to prescribe morphia in gradually increasing quantities. She has certainly taken as much as ten grains of morphia daily, and possibly the equivalent of twenty grains on two or three occasions. Another peculiarity as to the dose consisted in this: That, if during the former spree she took as much as ten grains of morphia a day, during the succeeding spree, no matter how long the interval, she will return to the dose with which she ended a former spree. This patient is greatly mortified when she gets over the sprees, and begs that she may be cured of the periodical craving. Dr. E. is now using the prescription in Naphey's *Medical Therapeutics*, which is said to be very efficacious in numerous cases in the English Hospital at Pekin, China; but not the slightest perceptible benefit has resulted in overcoming the desire.

Dr. J. B. McCaw said this *spreeing* propensity was certainly very peculiar in the case just reported. As to destroying the appetite for morphia, the various quack and proprietary so-called "antidotes" all contain opium, so far as he knew or believed. His observation has taught him that some people may use opium without injury. He had known ladies, especially during attacks of ovaritis, who would take immense quantities of opium—sufficient to produce fatal effects at other times. There are some habits, he thought, much worse than that of opium. For instance, in the case of a gentleman acquaintance who was so addicted to his wines, &c., that he was fast becoming a common sot, disgracing self and family during his alcoholic intoxications, Dr. McCaw advised that, if the man could not resist the desire for a stimulant, he should take to the opium habit as preferable to the alcoholic. The result was, that his patient did leave off alcoholic stimulants, became an opium-eater, resumed his social position, and his family became content to let him take the opium so long as he would not touch wine or whiskey, etc. This satisfaction with opium continued for sixteen years, and he restored himself to the confidence and affections of his acquaintances. But at the end of the sixteen years, his old enemy attacked him again in such a manner that he could no longer resist. He sur-

rendered himself to a life of alcoholic intoxication again, and died from the effects of whiskey in sixty days. Of course it is only in the most aggravated and aggravating conditions that he would recommend this substitution of one vice for another. He thought the restraint of inebriate asylums should be imposed upon those who could not break the whiskey or opium habit, or who could not resist the temptations to use these agents to excess. A State law should be made which could be enforced to imprison inebriates, upon detection, in asylums.

Dr. W. W. Parker now has a case of opium habit under treatment. But he believes that, in chloral hydrate, we have a most potent agent to overcome the opium habit as it is in cases of dipsomania. He thinks milk the very best stimulant, as well as food, after a prolonged spree. The patient of "opium habit" now on his hands, is a man, and had been on a spree for three weeks. When the doctor was called in, the patient had hiccoughs and vomiting and convulsions. A purgative dose of calomel was given; but as this did not duly act, a bottleful of the citrate of magnesia was afterwards given. A dose of chloral quieted the patient to sleep. As cold milk would not remain on the stomach, it was given slightly warmed, and there was no further trouble.

Dr. F. B. Watkins has met with several cases of opium-habit. In the treatment, he believes it a mistake to suddenly withdraw opium. In one case in which he had thus suddenly withdrawn the opium, in a patient of religious convictions, and who was anxious to be cured of the habit, he gave camphor, valerian and hyoscyamus, but without benefit. His patient went five days without food or sleep, and suffering great restlessness, anxiety of mind, &c. He was then called to see her again, and found her surface cold and clammy, nearly pulseless, and perfectly prostrated, and shrieking for morphia. He then resorted to the following treatment: He put a given quantity of morphia in eight fluid ounces of water. A teaspoonful dose was to be taken from the bottle at regular hours; but for each teaspoonful thus taken, a similar quantity of pure water was to be put into the bottle. Thus, with each successive dose, she was taking smaller quantities of morphia, and finally was taking pure water. The result was altogether satisfactory. Dr. Watkins then alluded to the tissue changes due to alcoholism, opium-habit, &c.

Dr. Parker alluded to the small quantities of food usually taken by those who are addicted to the opium-habit. The digestive powers are destroyed, and the bowels are usually filled by scybalous masses. And yet it is strange that opium-eaters do not generally become emaciated; on the contrary, they have

usually a better *embonpoint* than other people. He mentioned the case of a well known woman in this city, addicted to the opium-habit, who partakes of hardly an ounce of solid nourishment a day, and yet does not seem to suffer for want of food.

Dr. J. S. Wellford does not believe in the "tapering off" treatment. He favors breaking the habit at once. He related several cases that had occurred in his practice to sustain this advice. He thinks a great deal of blame for the prevalence of the opium-habit rests rightly with physicians who prescribe opium for the most trifling aches, etc.

Dr. M. L. James thinks physicians must have recourse to opium in some inveterate cases—even at the risk of the opium-habit. He has a case of a lady with retroflexion of uterus of twenty years standing, who had formerly been under a physician who always prescribed morphia during the exacerbations of pain, until he had produced the habit with her.

Mr. Hugh Blair, of the Richmond Pharmaceutical Association, remarked upon the excessive quantities of the drug now consumed in this city, as shown by the calls for it at drug-stores without physicians' prescriptions.

Upon motion of Dr. Edwards, a committee of three was appointed to confer with a committee of the Pharmaceutical Association, and inquire into the extent of the opium-habit, and to suggest what, if any, protective legislation is needed. Drs. Edwards, McCaw and Parker were appointed on the part of the Academy, and Messrs. Hugh Blair, P. E. Dupuy and Joseph N. Willis on the part of the Richmond Pharmaceutical Association.

February 5.—**Physiological and Therapeutical Action of Phosphates, etc.**—Dr. J. S. Wellford believes phosphorus to be a pure stimulant. He does not regard either the phosphates or the hypophosphites as medicines, but looks upon them rather as food, supplying a waste continually going on in the system. But at least 50 grains of phosphates are daily excreted by the kidneys; hence he does not believe this waste can be supplied by the administration of pure phosphorus or its preparations, for the doses are too small. The phosphorus which the system normally receives is contained in the food. In pregnancy, the blood is rich with phosphates, in order that the wants of the forming fœtus may be supplied. That the phosphates are thus absorbed is shown by the fact that these principles are either or nearly wholly absent in the urine in pregnant women—the natural channel for the elimination of all forms of phosphorus in health. Whenever a large or anything like the usual quantity of phosphates appeared in the urine of pregnant women—which in

the non-pregnant woman or in the healthy male was about 50 grains daily—this was an evidence of the death of the fœtus, for then there was no longer any demand on the part of the fœtus. Immediately after the birth of the child, phosphates also again occur abundantly in the urine of the mother until lactation begins, when they normally disappear from the urine of the nursing women. They are required by the milk. He believes that dental neuralgia during pregnancy, as well as during lactation, resulted from the appropriation in the one instance, of the normal phosphates by the fœtus, and in the other by the milk, which phosphates should serve as the nervous stimulants of the woman or else go to her bony and nervous systems. It is a well-known law, too, that the last formed tissues, as are the teeth, are the first to give way under any extra demand for phosphorus. He has often seen teeth of pregnant or nursing women drawn by dentists, which seemed normal in their external appearance, but upon examination after withdrawal, consisted of nothing more than the enamel. He attributed cases of dental neuralgia, stomatitis-materna and pain in the back, occurring in pregnant and nursing women, to the demand for phosphates which nature was unable to supply, unless the mothers would take food rich in phosphorus, such as unbolted flour-bread, etc. His treatment of such cases was always to give, first, food rich in phosphorus and also the pyrophosphate of iron with citrate of ammonia. Of course the phosphates are demanded in rachitis, osteo-malacia, etc. He regards Winchester's hypophosphates as an unnecessarily expensive way of administering phosphorus. When phosphorus is required, he thinks the administration of crystalized phosphoric acid with the syrup as the best form of prescription. An *excess* of phosphorus in the system causes fatty degeneration of the soft tissues, and osseous troubles. For instance, disease of the lower jaw-bone occurs in persons who work in match factories where the white phosphorus is used, although it is not occasioned when red phosphorus is used. In other words, the red phosphorus does not possess the poisonous properties of the white phosphorus.

Dr. L. S. Joynes remarked that he had understood Dr. Wellford to say that if an examination of the urine revealed a deficiency of phosphates in that secretion, he would regard it as an indication for the administration of the hypophosphites, and asked whether it would not be more rational to give the phosphates at once, and save the system the task of converting the hypophosphites into the phosphates? There can be no doubt, he said, of the physiological importance of the phosphates. This is sufficiently proved by their abundant presence and their universal

diffusion in the organism. Their amount far exceeds that of any other solid mineral constituents; there must be several pounds' weight of these phosphates in the living body. Among them, the phosphate of lime takes the lead. It constitutes fully half, or more than half, of the weight of the bones, and considerably more than half of the weight of the teeth. In these parts, however, it performs merely the physical or mechanical office of hardening or solidifying the structures. But the phosphate of lime is also present in *every other tissue*, even in those which are softest and most highly vitalized, such as the muscles and the brain—though in much smaller proportion than in the bones and teeth. It is, hence, probable that it has an important concern in the nutrition and constitution of the tissues. It is also present in the nutritive fluids of the body (the blood, chyle and lymph); the protein compounds, albumen, fibrin and casein, which are the leading tissue-forming materials, are always found closely associated with phosphate of lime; the stores of nutriment, which nature provides for the development of the tissues of young animals, viz: the milk and the egg, likewise, contain it. All these facts prove its importance as an element of nutrition. Fothergill classes it among "hæmatics," that is, remedies which go to make the blood, and through it to supply the tissues with the materials they require for their proper constitution. Dr. Joynes pointed out several conditions in which the administration of phosphate of lime is rationally indicated, viz.: rickets and osteo-malacia, defective conditions of the teeth in childhood, ununited fractures, or where non-union is feared, owing to some constitutional defect or derangement, the exhaustion produced from prolonged lactation; also in incipient phthisis, scrofula and other conditions in which defective nutrition is a leading element. Phosphate of lime is present in considerable quantity in the breadstuffs, especially wheat, in beans and other vegetable food; also in animal flesh and milk. But it is likely that in some cases the power of assimilating this salt is impaired, so that advantage may accrue from giving an extra portion of it as medicine; and then it would seem preferable to prescribe it in one of the *soluble forms* recently introduced, viz.: the lacto-phosphate and the hydro-chlorated phosphate of lime.

But there are other phosphates in the body besides that of lime. Phosphate of magnesia exists along with phosphate of lime in the bones and elsewhere, but in much smaller proportion. Phosphates of soda and potash are also always present—the former especially in the blood, the latter in the muscles. But of the physiological and therapeutic uses of these phosphates, there is not a great deal to be said. As it regards the hypophosphites,

Dr. Joynes expressed a strong doubt whether they ever reach the tissues and exert their therapeutical action in their original form, and thinks it more likely that they are converted by oxidation into the phosphates. Hypophosphorous acid, having but one atom of oxygen for each atom of phosphorus, has a strong tendency to attract more oxygen, and pass into the highest state of oxidation, which is PO_5, that is, phosphoric acid. In the stomach, the hypophosphorous acid existing in any of the hypophosphites which have been swallowed, will be liberated by the stronger acids of the gastric juice, and will then combine with oxygen to become phosphoric acid—a chemical action which is greatly favored by the heat of the stomach. As to the oxygen required for this combination, there is no difficulty in finding it, as we always swallow more or less air with our food, and analysis of the gas contained in the stomach, always shows it to contain more or less oxygen.

In like manner, Dr. Joynes was strongly inclined to the opinion that phosphorus, when ingested as medicine in the elementary state, passes by oxidation in the stomach into the state of phosphoric acid. This change constantly goes on at ordinary temperatures when phosphorus is exposed to the air, and it is hard to believe that it does not also take place in the stomach, where the phosphorus is exposed to a heat of 100°F. The sugar-coating of the pills will be no protection, for that is speedily dissolved by the gastric juice; nor will the fatty matter with which the phosphorus is incorporated, for that is straightway melted by the heat of the stomach and mixed up with the other contents of the organ. Dr. Joynes, in conclusion, expressed a high opinion of phosphoric acid as a tonic, and referred to the favorable reports by practical men of its virtues in various affections of the nervous system, characterized by deficiency or depression of nerve-power.

February 19.—**Long Existing Fæcal Impaction, with Dysenteric Symptoms.**—Dr. W. W. Parker was called during the past week to see an old lady who supposed herself to have dysentery. She was suffering constant tenesmus, but passed no blood or mucus. She had, however, frequent watery alvine discharges. He ordered an enema of laudanum; but this doing no good, he then made a digital examination of the rectum when he found a mass almost as large as a fœtal head which proved to be accumulated fæces. The history of the case went to show that the mass had been accumulating ever since the exhibition of the State Agricultural Fair, in November, 1877. The watery discharges of course passed around the fæcal mass. Dr. Parker succeeded in removing this mass in three sittings. While he

was removing it, his finger frequently came in contact with little sharp points or pieces of hardened fæces, so hard as to cut the finger like spiculæ of bone. The important lesson of this case is always to make a complete and careful examination of the conditions before prescribing. Opiates, astringents, etc., which seemed indicated by the symptom of watery alvine discharges with tenesmus, could have done no good; on the contrary, such agents, if long continued, would have done injury.

Dangerous Effect of Chloroform.—Dr. Parker also reported the case of a girl, 18 years old, who was healthy with the exception of some dyspeptic symptoms, and a small calculus in her bladder. She had an unusually fine, plump, healthy look, but ate exceedingly little. To anæsthetize her during the extraction of the calculus, he administered chloroform by inhalation, which she took readily. By the time he had given two drachms in all, her pulse became very feeble, and she had tonic spasms; indeed her condition was very alarming. Slapping failing to revive her satisfactorily, he resorted to Nélaton's method with speedy success. He desisted from further anæsthetizing for the time. But a day or so later, he first gave her whiskey, and then administered the chloroform. She required very little to bring her readily under its influence. She had a flushed face during its administration, but no spasms, and she returned readily to consciousness. He gave the chloroform so as to produce snoring, and to extract a stone.

Dr. O. A. Crenshaw said he never thought of giving chloroform before he had first administered a good drink of whiskey.

Amyl-Nitrite Successful in Tetanus.—Dr. John M. Payne reported the case of a negro boy who had stuck a nail in his foot. After the extraction of the nail, a gravel was also found in the cavity, caused by the nail, which was also taken out. Several days afterwards, he was called to see the boy "in fits." He found him in tetanic convulsions, marked by locked jaw and opisthotonos. He at once administered amyl-nitrite by inhalation—three or four drops on a pocket handkerchief every time the symptoms of opisthotonos, etc., appeared. A consulting physician being call in, pronounced the case one of cerebro-spinal meningitis, which diagnosis was negatived by the history of the case—the symptoms above given, and the rapidly favorable termination of the case. The consultation, however, resulted in the recommendation of using, during the night, croton-chloral, chloral-hydrate and potassium bromide, in commanding doses. By the next morning, the symptoms were abated, but tetanic convulsions came on at times which were always speedily relieved by the inhalation of the amyl-nitrite. Dr. Payne had often used amyl-

nitrite in cramps, and had never known it to fail; but he has never seen a more decidedly satisfactory result than in the case just reported. In three or four days more, his patient was entirely relieved of the lock jaw and opisthotonos, and is now well.

Aortic Aneurisms and Heart-Clots.—Dr. M. L. James presented two specimens of aneurism of the arch of the aorta, and two of heart-clot. The first specimen of aneurism was interesting, as being probably the result of an atheromatous degeneration of the lining membrane of the aorta (spots of that degeneration being found in the aorta adjacent to the aneurism), as containing an immense deposition of coagulated fibrin, and as being marked by some obscurities of its symptoms and signs.

It was formed on the descending portion of the arch, and had attained at death a size nearly equal to that of the head of a new-born infant, and was nearly filled with fibrin in stratified layers. It occurred in a man forty years of age, who had somewhat dissipated habits. The first symptoms occurred about sixteen months previous to death, and were dyspnœa and hoarseness of voice—this last symptom being doubtless due to pressure upon the recurrent laryngeal nerve; the first to pressure on the left bronchus. He was first seen by Dr. James eleven months previous to death, the patient suffering at that time both great dyspnœa, especially at intervals, marked by stridor of respiration on the left side, and diminished vesicular murmur, and moderately diminished arterial pulsation in the left arm. A circumscribed rounded elevation marked the infra-clavicular region of the left side, the sternal extremities of the first and second ribs; and the clavicle was slightly raised. There was no aneurismal thrill, but the systolic and diastolic sounds of the heart were heard with great distinctness. Dr. James thought that he could distinctly perceive the *expansive* aneurismal pulsation in the second intercostal space on the outer side of the tumor, but other medical gentlemen differed with him on that point. At intervals, the patient was accustomed to discharge from the lungs in considerable quantities a fluid which was supposed, by several physicians, from the report of the patient, to have been pus from an abscess at the site of the tumor. At the autopsy the tumor was found to compress the left bronchus, and the left lung was collapsed. The patient was seen by several of the most eminent physicians of the city, some of them being here present, who expressed some variety of opinion in diagnosis.

Two of them are remembered to have believed that there was a displacement of the heart to the place of enlargement; five others that there was a bony abscess, while two agreed with Dr. James in believing it to be aneurism. The grounds upon which Dr.

James based his diagnosis were, that he knew of no force, except an aneurism, capable of producing a circumscribed elevation of bones of such strength of structure as those involved; the distinctness of both the systolic and diastolic sounds of the heart, and the expansive pulsation, as he perceived it. The absence of the aneurismal thrill, he did not think material, as that is frequently absent in aneurisms. He had no doubt that the fluids discharged, supposed to have been pus from an abscess, were collections of mucus, with possibly pus mixed, dammed up in the bronchial tubes, which occasionally found a passage for escape in a changed position of the large deposition of fibrin in the aneurism.

The patient was seen by Dr. Maclin, the resident physician of the Retreat for the Sick (at which institution he died), less than an hour before dissolution. At that time he was quite active, and seemingly as likely to live as he had appeared for sometime previous, and in a considerable rage with some of his attendants. When next seen, he was in articulo mortis, the superficial capillary circulation being greatly congested. A round, white, firmly-formed heart-clot, which Dr. James exhibited, evidently having existed for sometime previous to death, of nearly the size of a walnut, was found in the right auricle. Dr. James believed that the immediate cause of his death was the moving of that clot during his excitement into the right auriculo-ventricular opening, thus cutting off the current of blood at that point, it having been sufficiently large to do so.

Dr. James remarked that the deposition of fibrin in this case was suggestive of hope in the treatment of aneurisms in their earlier stages and under favorable circumstances.

The other specimen of aneurism was from a patient who died at the Alms-house, who, six months previously, had been operated upon successfully for aneurism of the femoral artery, by Dr. Isaiah H. White. A small aneurism of the aorta was diagnosed by Dr. White, Dr. J. S. Wellford, Dr. James, and other gentlemen, whose names are not now remembered, at the time of the operation, but on account of the sufferings of the patient from the femoral aneurism, the operation was proceeded with, notwithstanding. A remarkable feature of the operation was the easy toleration of chloroform, whose administration produced no inconvenience whatever—notwithstanding the existence of the aneurism, with regurgitation through the aortic valves. This aneurism occurred just as the aorta emerges from the heart, and produced death by the distension of the aortic opening, which palpably allowed a copious regurgitation, and produced hypertrophy of the left heart.

Dr. James also exhibited a beautiful specimen of a heart-clot *in situ*, of an elongated form, white color, and firm structure and attachment, occupying the right auricle, and extending through the tricuspid opening. The patient was not seen by Dr. James during life, and having been maniacal for several weeks previous to death, the presence of this clot was not discovered by the medical attendants. He regarded this clot as one not likely to produce death as long as it remained strong and attached, but thinks it almost certain that it would have afforded a murmur of the *tremissement cataire*, chirping, or chirping-coo variety.

Analyses, Selections, &c.

Intra-Uterine Submucous Fibroids.—Dr. E. T. Easley, of Little Rock, Ark., contributes a review paper on this subject to the February No., 1878, of the *Richmond and Louisville Medical Journal.* ("The Surgical Treatment of Certain Fibrous Tumors of the Uterus, heretofore considered Beyond the Resources of Art.")

Dr. Washington L. Atlee's prize essay in 1853 was a revelation. Although Amussat, Velpeau, Lisfranc, and other authorities had alluded more or less definitely to the enucleation of these growths, and some of them had practised it, Dr. Atlee's paper contained the first systematic account of the procedure. The principles and procedures laid down are essentially the same as those of his recent essay before the International Congress at Philadelphia; and taken together, these constitute the most advanced and exhaustive views on this important subject.

Writers are pretty well agreed as to the classification of the varieties of uterine fibroid tumors. Clinically, it is important to recognize the broad distinction that has been made between those which give origin to bleeding and those which are not prone to do so.

Intra-uterine submucous, sessile tumors are attached to the inner wall of the uterus, immediately below its mucous lining, project into its cavity, and are capable of distending the organ to various degrees—from the size of an orange to the size of a seventh-month pregnancy. Their increase in bulk is usually tardy, but still uncertain, and far from uniform within given periods. Their development is chiefly in the direction of the mucous surface. Their shape is ordinarily ovoidal, their largest

diameter corresponding to the axis of the outlet. There is at times an appreciable narrowing around the outline of attachment, but oftener there is not even the rudiment of a pedicle. They, of course, receive a covering from the mucous coat of the uterus, and this envelope becomes very much more vascular as a consequence of the irritation and pressure. The vessels upon the surface of the tumors become congested, tortuous and thin-walled, and excessive bleeding is very liable to occur, especially at each return of menstruation. Menstruation is irregular, generally more frequent, more profuse, often menorrhagic, the discharge frequently being stringy and clotted. Sometimes there is hæmorrhage, sudden and overwhelming, rapidly draining the vascular system and prostrating the vital powers. In the intervals, the patient is commonly more or less annoyed with leucorrhœa, and even when the tumor is of comparatively small size, bearing-down or dragging pains may be experienced. As it enlarges, it gradually distends the uterus. The distention may be confined to the body alone, or it may likewise invade the cervix and dilate the os tincæ. The pain of a dragging character in the back and loins is now more constant, and a feeling of pressure and distress on the anus and neck of the bladder troubles the patient. The pains closely simulate those which attend labor, and are often as severe; they are most likely to occur at menstrual periods, and the expulsive efforts of the uterus acting on the tumor frequently partially opens the os uteri. If a digital examination be made at such time, we will probably be enabled to detect the intra-uterine growth when the exploration would otherwise be impracticable.

The diagnosis in the early stage of these tumors is nearly always obscure, but at this period the attention is seldom so decidedly attracted to them as to demand interference; indeed, they may exist for years without inducing hæmorrhage or serious inconvenience of any sort. If no suspicion of pregnancy exists, and it be determined that the enlargement of the uterus is internal, especially if it be uniformly increased in size, with no nodulated feel, we ought to begin to see our way clear. If the tumor be situated on the posterior wall, a finger in the rectum, while pressure is made from above, ought to detect the fibrous mass. The hæmorrhage and pain are to be regarded as valuable elements in deciding our opinion. As for the rest, the sound, or the finger if practicable, ought to render our diagnosis almost, if not quite, certain. However, in many of these cases, our opinion of the location and dimension of the tumors must remain more or less conjectural. Should we be so circumstanced, nothing is left but a resort to exploratory dilatation of the cervix, which is

to be effected by tents, or what in some instances will be found better, by nicking with the bistoury. The great danger to be combated is unquestionably the loss of blood, which is one of the most constant symptoms. The pain and general impairment of health bear a direct and almost invariable relation to the quantity and frequency of the hæmorrhages, and it is certain that no other indication of treatment is so pressing. The patient may become exsanguine, pallid, feeble, irritable and despondent. In this condition of anæmia and depressed vitality, a rapid train of unfortunate symptoms may quickly supervene, and death end the scene.

A few words in relation to the nature of this bleeding and its surgical relief. It is a fact of primary importance in the inquiry that the hæmorrhages do not proceed from the uterus itself, but from the vessels of the mucous coat which cover the tumor.

Another proposition, demonstrated by actual experiment, as well as by reason. is that, if, during hæmorrhage, the knife be passed into the cavity of the womb and a free incision be made into the most exposed portion of the tumor, bleeding ceases almost instantaneously. The divided superficial vessels contract, a coagulum is formed and hæmorrhage stops. There is, of course, a small gush of congested blood; it lasts, however, but a short time, and has never been known to be alarming in quantity.

However grave a procedure of this sort may be considered, it has been apparent in all the recorded cases that life is not endangered by the shock or magnitude of the operation. On the contrary, when death has resulted it has been brought on by some secondary complication—as exhaustion, septicæmia, pelvic inflammation or pneumonia; and never, so far as I can ascertain, from secondary hæmorrhage.

A case is now presented by Dr. Easley: Mrs. F. G., thirty-four years old, tumor intra-uterine submucous, attached to the posterior surface of the uterus as far down as the os tincæ; the tumor freely incised and partially broken up; supposed weight eight pounds—recovered. In July last, the following history was obtained from herself: She commenced menstruating at the age of fifteen years, and was regular, although the discharge was often profuse, and constantly attended with pain until her marriage, at nineteen years of age. Of three conceptions, only the first, reached maturity; the child died three weeks after its birth of marasmus. The other pregnancies terminated in miscarriages at three and four months respectively. For nearly three years copious floodings at each menstrual molimen have been the rule; the pain has been of a bearing, dragging nature

in the loins, back, and region of the bladder, and frequently so great as to occasion very acute suffering. At times, for one or two periods, the menses would be nearly or quite normal in character, when for a series of months there would be a return of the pain and hæmorrhage. She had repeatedly been given, by former physicians, iron, mineral acids, ergot, and quinine, and no doubt with temporary benefit. She had been subjected to instrumental examination, but had received no satisfactory information. She was despondent and entertained but little faith in drugs. An examination revealed the following conditions: The uterus was enlarged in all its diameters; laterally it extended to a point midway on a line from the linea alba to the ilii, and presented a decided eminence in front; the fundus of the organ reached well up to the umbilicus, and its outlines were uniformly smooth, globular and firm; percussion yielded a flat sound; the vagina was capacious and abnormally short; the os, soft and without tenderness, was very tolerant of manipulation. On account of the abrupt impingement of the growth on the anterior surface of the womb, it was found impossible to pass Simpson's sound up to the fundus or over the tumor; this, however, was accomplished with a soft catheter. The finger in the rectum afforded valuable evidence of the existence and location of the tumor. Drawing the uterus down with the tenaculum hooks, I attempted to introduce the finger, but this failed. A sponge tent was now introduced and removed after five hours; two days later a tent of larger size was inserted and removed. The effort to insinuate the finger was again made, and being the second time disappointed, the neck was cut laterally after the manner of Sims' procedure, only to a less extent. The finger could now be introduced, and immediately encountered a firm, solid body, occupying the cavity of the uterus, and attached posteriorly for fully three-fourths of its area. After exploring the tumor satisfactorily, the little wounds made by the bistoury were cleansed and dressed, and the patient allowed to rest for three days. During this interval the patient had tonic doses of quinine, a generous diet, and slept well.

I now found the os free from inflammatory tenderness and readily dilatable. While the uterus was steadied by the tenaculum in the hand of an assistant, my left forefinger was without impediment passed through the os and well up to the most projecting point of the growth. Using this forefinger as a guide, a long-bladed knife was carried up to its extremity, being careful to keep the cutting edge of the instrument towards my finger. I now turned the edge of the bistoury directly back against the tumor and pressed the instrument down into the growth. The

tumor in this first incision must have been cut to the depth of an inch; the sense of resistance was decided and a grating sound returned, indicating plainly the fibrous consistence of the mass. The knife was not entirely withdrawn until I had pushed it twice into the tumor and bisected the growth in a direction oblique to the first cut. There was a pretty free gush of venous blood, which did not continue long; in fact, the bleeding had altogether ceased before the speculum was removed from the vagina. The elastic fibre of the tumor after it was cut appeared to bulge forward beyond its mucous envelope, but it was found impossible, on account of the uterine contraction, to enucleate it to any useful extent, and I did not persist in the effort.

The object of the procedure was to inflict such injury on the tumor as to cause destruction of its vitality, and degeneration. This is a part of the process of enucleation by inducing gangrene of Dr. Atlee. "Indeed, it would appear that the action of the oxygen of the air, like a portion of yeast in a fermentable mass, may originate in any part of a fibrous tumor an action of eremacausis which may extend throughout the whole." Whatever we may think of this theory of the process of their destruction, the fact remains that when these tumors are freely incised and more or less broken up, they are sure to perish and come away in fetid, sloughy masses. Originate as it may, the effect of such interference is necrosis, and as Barnes has well said, "it is easy to set up this process; it is not easy to limit it."

On the third day from the operation the vagina was bathed with sanious watery-discharge; but from this time the discharge began to assume greater consistency, until pieces of dead tumor, more or less recognizable, began to appear. On the seventh day a small portion of tumor was twisted loose with the long dressing-forceps; this was repeated on the tenth day. With these exceptions, no effort was made to separate the dying mass. On three occasions portions of sphacelated tumor were removed after they had descended into the vagina; one of these represented in size one-sixth of the growth. The discharge was tough, stringy and ash-colored, resembling wet tow, and again greenish-colored, thick, and having the unmistakable putridity of decaying animal matter. The latter was by far the most abundant. Notwithstanding the most systematic efforts at cleanliness and disinfection, the odor was at times almost intolerable. The vagina was thoroughly cleansed twice daily with a wash of permanganate of potash.

The tumor was supposed to have weighed six or eight pounds. The discharge did not finally cease until the thirty-fourth day after the operation. During this protracted period, the patient

had quinine three times daily, with iron, stimulants and the best diet she could be induced to take. Quinine was given freely, as the best of all prophylactics against nervous exhaustion and irritative fever, as well as for its alleged value as a tonic to the uterine muscular fibre.* It may be asked why ergot, so extolled by Atlee and so popularly commended in this connection, was not administered to induce uterine contractions and the extrusion of the tumor. In the first place, it did not seem likely that any effort of the womb would project the mass until it had become detached by necrosis. Again, I doubt the propriety in such cases of prolonged uterine excitation by ergot, but I do not doubt the deleterious effect of the long-continued use of that remedy on the stomach, the digestion and the blood. After disintegration had fairly set up, the discharge was always free; had it ceased at any time I was prepared to dilate the os, to give exit to the retained slough, as it is certain that neither ergot nor any other agent could have supplied the indication of giving ready exit to the gangrenous material.

The temperature, range and pulse-rate were not regularly kept. On the eighth day the patient had a distinct rigor, another on the fourteenth, and it was obvious she barely escaped the appalling complication, constitutional toxæmia. The conviction has been acquired that the most frequent cause of death in such cases will always be septicæmia, and that it is especially prone to occur if the drainage be in any degree impeded. Dr. Sims, in an address of remarkable elegance and candor before the obstetrical section of the American Medical Association in 1874, speaking of ovariotomies, announced what is held to be true as to the cause of fatal terminations: "I believe," he said, "the rule is that patients die not often, but sometimes from hæmorrhage; rarely from peritonitis; almost universally from septicæmia." This view, endorsed before and since the date referred to by such men as Virchow, Peaslee, Thomas and Dunlap, has largely modified the treatment and results in cases of abdominal section. As to the case in hand, more than once I had well

*Gordon, Campbell, Rochester, Byford, *Trans. Int. Med. Cong.*, Philadelphia, 1876, pp. 774-5-6. There has been considerable controversy of late in regard to the influence exerted by the sulphate of quinine over uterine contractions. I have been much misunderstood on the subject, and views have been attributed to me which I have never entertained. For the present, I wish only to say that I have no doubt whatever of its great value in atonic conditions of the uterus, such as inefficient contraction in labor and in passive hæmorrhage, whether malarial complication exists or not. The discussion referred to above will be found to contain advanced views. I must also beg to refer my readers to a paper in the *Virginia Medical Monthly* (Quinine in Parturition) for July, 1876.

nigh despaired of her life. She made a tardy and painful, but ultimately perfect recovery.

Were I asked if I would resort to the operation again under similar conditions, I should hesitate before giving an affirmative answer. All authorities are agreed that the operation is a hazardous and uncertain one, and the statistics taken at their best render its propriety questionable. No man ought to subject his patient to such an operation unless fully persuaded that her life is in great jeopardy without it.

Hutchinson in his admirable article (*Holmes' Surgery*, vol. v, page 15), has divided operations of enucleation into two groups. In one of these, the intention is to remove the tumor at the time; in the other, so to derange its relations and interfere with its vitality as to induce sloughing. It would appear that the risk to life of the two methods is nearly equal, the smaller tumors being most suitable for the former recourse, the larger best adapted to the latter. "In the largest of all, those for instance in which the tumor approaches the size of an adult head, no surgeon would ever dream of primary enucleation." When there is a failure to complete the removal of the growth at one operation, the case of course becomes one of enucleation by disintegration. Hutchinson tabulates six of these, of which two died.

If we add to the twenty-seven cases of enucleation by inducing gangrene, said by Hutchinson (1872) to be on record, my own and five others of which I have seen mention, we have a total of thirty-three. Of these, seventeen died, twelve recovered, and four were incomplete cases, in which the history was uncertain, or the tumors proved to be recurrent. Nearly all of these were cases in which the tumor was of such large size as to preclude the possibility of treatment by the primary method, and in many of them the patient had been reduced to a very low condition by loss of blood.

All experience proves that the knife possesses great advantages over the old method of destruction by escharotics. "The vitality of many uterine fibroids appears to be very small indeed, and comparatively little interference will often suffice to insure their death," whilst the manner in which large tumors, when they have once become sloughy, will, as it were, melt away, is quite astonishing.

The death rate of enucleation by inducing gangrene has been undeniably very great, and it is not probable that half of the cases have survived.

In the discussion before the International Congress at Philadelphia on Dr. Atlee's paper, Dr. E. R. Peaslee said: "I regard it as a safe rule not to interfere with fibroids. * * * * I

do not think we are justified in removing a fibroid unless the patient is in such a condition that she will die without the operation. In regard to cutting into a fibroid, I have found that an incision through its mucous capsule is valuable in arresting hæmorrhages, but I have never used enucleation, because I am afraid of subsequent bleeding." Dr. H. Lenox Hodge declared: "I have myself as yet never operated in a case of this kind, and have never met with a case which seemed to require it. I have seen many of these tumors of the uterus, and have the record of some of my father's cases, dating back many years, which are still under my observation. In my experience, the number of deaths resulting from such tumors when let alone is very small, and as the patient approaches the age of fifty years, the tumors often begin to diminish. In some of my cases no traces of the old tumors can now be detected." Drs. Kimball and Dunlap concur in the opinion that these tumors should be let alone, except when it is absolutely necessary to use the knife; that they sometimes disappear spontaneously, and that it always requires good judgment to tell what cases need operation. Dr. Barnes said: "We must have adequate reasons for these operations. I last year lost three patients from a sort of necrosis which supervened upon the incision of the capsule of submucous tumors and an attempt to enucleate them. This unfortunate experience has made me very shy of undertaking any such procedure, unless the whole tumor can be removed at one operation." In relation to the last point, notwithstanding the primary method has been so much commended, it is seen by an examination of the cases which have been detailed by the various operators that the mortality has been barely less than that furnished by enucleation by inducing gangrene. In the immediate extraction of large masses of tumor, the danger to life from shock, hæmorrhage and rapid pelvic inflammation is doubtless very great. Under this head, it is worthy of note, that the cases, few in number, of spontaneous disintegration and extrusion have been attended by as large fatality as those operated.

The high claims of ergot and the muriate of ammonia in the treatment of these tumors ought to be stated; those who have faith in the value of drugs in such cases will find these the agents best endorsed. The utility of the ergot in this connection rests upon such an amount of evidence that we are not permitted to doubt. Yet I cannot help expressing the opinion that the much-vaunted remedy is often given without good effect, and not infrequently to the detriment of the patient.

It is likely that there are very few cases in which the sincere surgeon would find it his duty to say to the patient that she

would certainly perish without an operation; yet it is unquestionably true that many deaths from these tumors do occur.

The following conclusions are offered:

1. Cutting operations for the removal of submucous intra-uterine fibroids are not justifiable, unless it is evident that their presence endangers life. There may be rare exceptions to this rule, as when the position and accessibility of the tumor are peculiarly tempting.

2. Primary enucleation, when at all practicable, is slightly preferable to the secondary method.

3. In secondary enucleation, the surgeon need not be solicitous to remove the growth *en masse*, but when the process is once set up he may with great certainty rely upon its piece-meal disintegration.

4. In primary procedures, the treatment should be chiefly such as is best calculated to limit shock, and afterward to nourish the patient and guard against pelvic inflammations.

5. In the secondary method, most authorities say the ergot of rye should be given to the extent of maintaining vigorous uterine action. Decomposing discharges and shreds of slough should be carefully removed, the patient's strength be sustained, and all constitutional measures to prevent septic infection strictly enforced. Locally detergent fluids are to be freely used, and the utmost cleanliness observed.

6. The mortality has exceeded one half, and it is not likely that it will ever be reduced to one-third of all the cases operated

A Review of the Subject of Cæsarean Section is given in the *Clinic*, February 23d, that is so full of practical interest that we cheerfully surrender a number of our pages to the report of a case and the discussion thereon which extended over two meetings of the Cincinnati Academy of Medicine.

Dr. George E. Walton reported the case of Mary F., who came under observation in 1869–70. She was frail, considerably emaciated, troubled with chronic bronchitis and asthma, and suffering from hip-joint disease of right side in the third stage—an abscess discharged in the groin. The hip joint disease became stationary, the abscess closed and she was able to walk without pain. February 8, 1877, she again sent for me. Found her living in a frame "barracks," the hygienic surroundings of which were miserable. She was thin, badly nourished; bad cough. Pulse 7[illegible]; urine frequent; diarrhœa; vomited often, even when nothing had been eaten. Weight 78 pounds. Abscess in right groin reopened, and is discharging. Menses ceased last July. Abdomen presents a tumor. Vaginal examination shows

the entire right pelvic wall to have assumed an almost straight line, no doubt due to ossific deposit; the left pelvic wall presents the usual excavation. The cervix uteri is soft but not dilated. The antero-posterior diameter of the superior strait is about two and a half inches, the transverse diameter about three and a half inches. On applying the stethoscope to the left side of the abdomen, I detected the fœtal heart beating 140 per minute.

Feb. 13. Os uteri is dilating slowly. Feb. 14. Second stage of labor commenced at 3 P. M. Bag of water formed; no engagement of the head. Dr. Cleveland after considerable manœuvring succeeded in applying a pair of narrow blade Elliott's forceps. Vigorous traction was made, but the forceps slipped. Again they were applied and again slipped—not the slightest advance resulting from the most violent force. Cæsarean section was then decided upon. Dr. A. G. Drury administered whiskey and ergot, and then sulphuric ether until profound anæsthesia was induced. The abdomen was thoroughly sponged with a solution of carbolic acid—one part to forty—in which the instruments and hands of the operators were dipped. A Codman & Shurtleff apparatus also threw a cloud of carbolized spray over the abdomen and along the line of incision. The incision extended from a short distance below the umbilicus to within about two inches of the symphysis pubis. No bleeding occurred in cutting down to the peritoneum. The incision in this membrane was not so long as the outer opening by about one inch at the lower portion. The full rounded form of the uterus, of a dusky red color, uncovered by intestines, filled the entire length of the incision. An opening was made in it not quite so long as the external incision. The back of the child, of a white color, was now seen. The hand was easily passed between the wall of the uterus and the body of the child until it was under the abdomen, when by lifting, it rose through the opening, the feet disengaging first and the head coming away last. I immediately tied the cord, and while so doing asked one of the assistants to remove the placenta—Dr. J. L. Cleveland did so, and found it to separate readily and without hæmorrhage. The child—a girl—was living and quite vigorous. The uterus did not, however, contract firmly, and there was very free hæmorrhage for a few moments from one of the edges at the lower end of the incision. This was, however, controlled by Dr. Jones. The uterine wall gaped considerably, and, at the suggestion of Prof. Conner, I introduced a silver suture midway its length, penetrating one-half its thickness, which appeared about three-eighths of an inch. At this stage of the operation Dr. Drury stated that the patient was pulseless, respiration was gasp-

ing and the carotids beat feebly. Those around felt sure she would die on the table. When bringing the external wound together it gaped between the sutures as it would in a dead subject. The wound was dressed with a layer of sheet cotton which had been saturated in a solution of carbolic acid—one part to forty. This was used as a substitute for antiseptic gauze, which could not be had in the city. Over this a layer of oil silk was applied, then another layer of carbolized cotton, then a layer of MacIntosh and, finally, a wide sheet of dry cotton, which enveloped the entire abdomen. The operation, including dressings, was completed in about twenty minutes and during all of the time the carbolized cloud of spray enveloped the wound and the abdomen. The patient, now completely collapsed, was placed in bed and given teaspoonful doses of whiskey and water as rapidly as they could be taken. In fifteen or twenty minutes she had rallied considerably. She was left with the directions to continue the whiskey and water every fifteen minutes.

9½ P. M.—Pulse 96 and had rallied well; 10 drops tr. opii every hour; teaspoonful of whiskey and water, and teaspoonful of beef essence alternately every fifteen minutes.

1st day, Feb. 15, 8 A. M.—Pulse 120. Pain when she coughs and is thirsty. At 10 A. M., pulse 110. Removed dressing under antiseptic spray. Wound looked well and nicely in apposition. 4 P. M. Pulse 132. Severe pain in the abdomen when she coughs. Strength good. Ten drops tr. opii every hour. 10 P. M. Sleeping calmly. Pulse 108 and full.

3d day.—Pulse 130. Slight suppuration of wound Quiniæ sulphatis one grain every two hours and ten drops tr. opii every two hours. In the evening the quinine was discontinued as it caused her to vomit once.

4th day.—Bed sore forming over coccyx.

6th day, Feb. 20.—Pulse 120. Tongue slightly coated and a dryish centre. Some tendency to diarrhœa. Ten drops tr. catechu every four hours, ten drops tr. opii every two hours.

7th day.—Pulse 120. Give 10 drops tr. ferri chloridi and 10 drops tr. opii every two hours. At 6 P. M., pulse 128 and perspiring freely. Has had no chill.

8th day.—6 P. M., pulse 124. Dr. George E. Jones in the morning found the sutures had given away in the lower part of the wound and that it gaped widely. He drew it closely together with broad adhesive straps and syringed the vagina freely with carbolized water.

9th day.—Pulse 124, tongue moist. Takes freely of egg-nog, rice and milk and beef essence. Sweats some at night. Wound closed one-third of its length from upper end. Remaining portion is granulating and discharging laudable pus.

10th day.—10 A. M., pulse 108. Sweat considerable last night. At 6 P. M., pulse 118. Her mother officiously attempted to turn her to her right side; it gave much pain, and was turned back to the left side. Is despondent. Pupils dilated. No sweating. Resume the tr. opii every four hours.

11th day, 12 M.—Pulse 100-112. Six or seven stools during the past twenty four hours. Wound is looking healthy and granulating finely. Ordered 20 drops tr. catechu every four hours, and to have egg-nog, rice and milk and beef essence. At 4 o'clock, after taking a dose of tr. catechu, she vomited freely. She again vomited at 6 P. M., after taking some rice and milk. She was exceedingly prostrated. Ordered one-eighth grain morphine every half hour, and half teaspoonful of whiskey and water every fifteen minutes. 9½ P. M., rallied well.

12th day, 9 A. M.—Pulse 120 and firm. Wound closed by granulation through two-thirds its length.

13th day, 10 A. M.—Pulse 124 and good. Tongue clean and moist. One stool without pain. Takes nourishment well and laughs readily. Wound closed by granulations to within one and a half inches of its lower end. In addition to egg-nog, to take some broiled beef steak cut fine. 9 A. M. Pulse 124 and good. Took the steak and relished it.

14th day, 9½ A. M.—Pulse 124 to 128 and feeble. Is a little flighty; marked failure of the vital powers. She had received no nourishment from 10 P. M. of the previous evening to this time and probably no attention. Ordered teaspoonful doses of whiskey and water every fifteen minutes, alternated with egg-nog every half hour. 12 M. Feebler, mind wanders. 3½ P. M. Condition unchanged. Passes urine involuntary. 9 P. M. Pulse 120 and strong. Delirious. Discontinue whiskey and give one eighth grain morphia every hour till quiet.

15th day, Mar. 1, 9 A. M.—Pulse 120 and wiry. Urine involuntary. Stools none. No heat of the skin. No evidence of pain. Delirious. Still takes nourishment. 3 P. M. Comatose. Pulse 120—feeble. 7 P. M. Died, evidently from exhaustion. No autopsy.

Commentary.—As to the operation there was nothing unusual in the procedure except the use of the antiseptic method throughout and the insertion of a silver suture in the uterine wall. To the thorough application of carbolized water, I think may be attributed in great measure the continuous healthy condition of the cut surfaces, and the prevention of pyæmia and peritonitis. The insertion of a suture in the gaping and uncontracted uterus seemed to be imperatively demanded, although it undoubtedly contracted thoroughly when the patient rallied from the profound arostration under which she labored at the time the abdominly

wound was closed. The propriety or utility of sutures in these cases especially if the womb be contracted has received considerable attention in late years. Dr. C. F. Rodenstein* collected seven very unfavorable cases in which the suture was used; four were successful. Braxton Hicks reports a case in which the womb contracted perfectly, no suture was used, the patient was progressing favorably, but suddenly died from peritonitis caused by discharges from the womb penetrating the peritoneal cavity. He says: "I cannot help thinking that had the uterine wound been closed in this case many of the most serious complications would not have occurred." Dr. Rodenstein arrives at the following conclusions:

"1. Introduction of suture is positively indicated when the uterine wound is not closed by contraction of the womb.

"2. Closing the uterine wound by sutures does not interfere with the success of the Cæsarean section.

"3. The application of uterine sutures after every Cæsarean section will probably diminish the rate of mortality."

It does not seem of special importance whether carbolized catgut, silver wire, silk or hemp, be the material used for the suture, neither that any provision be made for the removal of them. As to the disposition which nature makes of sutures which are inserted in the uterus and permitted to remain, I have not been able to find any evidence from records of cases. However, the conclusions of Spiegelberg and Waldeyer, drawn from experiments on dogs and rabbits, are "that small foreign bodies may be left in the peritoneal cavity without danger * * * provided the abdominal cavity is perfectly closed," and that ligatures are found either (1) closely encapsulated by newly formed cellular tissue, or (2) free in the peritoneal cavity, having slipped off from the tied parts, or (3) free as if swimming in a small cystic cavity of the stump." These conclusions† seem to apply to ligatures with silk, hemp or other organic material. The same result would undoubtedly ensue in using silver wire. In closing the abdominal wound care was taken not to include the peritoneum, but it seems, from the experience of others, and the results of ovariotomy, to be entirely unnecessary to use any precaution in this particular.

In all cases, it is exceedingly desirable to secure thorough contraction of the womb; for this purpose it may be manipulated in a way perfectly astounding to those who draw their conclusions from teachings some years back. In a case reported by

*Suture in the Cæsarean Operation. *Am. Jour. Obstetrics*, Feb., 1871.
†Wells on "Diseases of Ovaries," N. Y., 1873, p. 363.
‡*London Lancet*, 1876, Vol. II., p. 818.

Edmunds,‡ the womb was cleansed of clots, ice was applied to the interior and manipulations continued for three-quarters of an hour till complete contraction ensued. The woman was well by the twenty-third day. As Edmunds has operated twice with success for mother and child, it may be worthy of mention that the position in which he places the patient for the performance of the operation is peculiar. She is brought to the edge of the table in a sitting posture, reclining against the back of an overturned chair, and the legs are held by assistants. He thinks this position prevents the flow of liquor amnii and blood into the abdominal cavity.

Whether the liquor amnii should be evacuated or not before operating, is a point on which authorities are divided. Some claim that it should be permitted to remain, as its presence prevents undue contraction of the womb, which might interfere with extraction of the child. In this case no difficulty at all was experienced, though the waters had passed off sometime previously, and I should certainly in all cases evacuate, thus removing one source of danger by the escape of extraneous fluid into the abdominal cavity.

The placenta, it seems to me, should be removed as soon as the child is taken away.

The time for performing the operation is immediately that labor is fully commenced, not permitting the patient to become exhausted by delay and abortive attempts to deliver in some other way. It is well known that a far larger percentage recover on whom the operation is made the first day.

I may here mention a substitute for Cæsarean section which may prove superior as to the safety of the mother; that is *gastro-elytrotomy*. This operation, first proposed and practised in 1820, by Ritgen, of Germany, was almost forgotten till recently revived by Prof. T. G. Thomas.* The operation is as follows: The os uteri is first dilated. An incision is then made from the spine of the pubis to the anterior superior spinous process of the ilium. When the peritoneum is reached, it is drawn aside and the vagino-uterine junction sought; a sound is then passed into the vagina and that is opened upon it. The cervix is then drawn upwards into the iliac fossa while the body of the womb is rotated and depressed on the opposite side of the abdomen; delivery is then effected by turning. The operation has been made four times, twice successfully by Dr. J. C. Skeene, of Brooklyn. The bladder was, however, injured in each of his cases.

Another operation, consisting of *extirpation of the uterus*, was

Amer. Jour. Obstetrics, 1871, Vol. III.

recently proposed by Dr. Reid,* who claimed for it the following advantages over simple Cæsarean section: "That hæmorrhage can be readily controlled, that no wounded organ is left in the abdominal cavity, and that a deformed female can never again become pregnant." The operation has been made four times, twice successfully for both mother and child, and in a third case the child was delivered alive.

It may be noted, however, that either of these operations, gastro-elytrotomy, or extirpation of the uterus, is more difficult of performance and demand far greater skill in the operator than Cæsarean section.

Propriety of the Cæsarean Operation.—This question divides itself into two parts. First, the justification in this case. Second, the justification in any case.

As to this case, let us briefly recall the facts. A poor girl, nineteen years of age, the subject of active and incurable hip-joint disease, also of chronic bronchitis, is pregnant of a living child at the ninth month. The child cannot possibly be born alive by the natural passages. The destruction of it by instruments and extraction of its remains through the narrow passage involves the probable death of the mother. The delivery by Cæsarean section may also cause her death, but will rescue the child. What shall we do? Arithmetically stated, if we regard the value of the life of the mother and child, each as ten, the problem stands about thus:

	For Craniotomy.	For Cæsarean Section.
Mother's chances,	5+1	5–1
Child's chances,	5–5	5+4
	10–4=6	10+3=13

In this problem 1 represents an unknown quantity—the vitality of the mother; a quantity that could only be proximately solved by learning the results of at least twenty-five cases of craniotomy and twenty-five cases of section under exactly the same conditions. I have here given the advantage, as concerns the mother, to craniotomy, though, as will be shown further on, the chances are even when the antero-posterior diameter of the pelvis measures two and a half inches. Notwithstanding this, we find the balance swings to the side of section, and there are several points in favor of section as a life-saving remedy in this case, and the result justified the conclusion. The woman lived fifteen days notwithstanding the most unfavorable hygienic surroundings. The wound was perfectly healthy and almost closed,

**Wiener Med. Wochenschrift,* Nov. 10, 1877 (Clinic).

lacking but one inch, and her death was probably the result of neglect on the part of attendants. A living child was born.

The English doctrine is that the mother's life is the most valuable, "sacrifice the child, save the mother." And this has been and is the prevalent doctrine in this country. The result of this sophistical reasoning has been the cultivation of child murder. Instruments of the most perfect kind have been devised for this purpose, and in the hands of the indiscreet, have caused the loss of myriads of lives. No! the true office of the physician is to save life irrespective of condition. Life in its totality, not in its quality. We find in Great Britain, where Cæsarean section is almost ignored, craniotomy has heretofore been performed on an average once in every one hundred and fifty cases,* whilst in Germany, where Cæsarean section is endorsed, and the life of the child is held equally sacred with that of the mother, and every effort made to save it, only once in every seventeen hundred deliveries.* When we know that there are 700,000 deliveries† in England every year, and that in these English craniotomies, one out of every five mothers died‡ and all the children were slain, we comprehend the slaughter of infant life resulting from the pernicious doctrine. It may be asked if there are not more mothers who die in Germany in proportion to the number of deliveries than in other countries. The answer is in the negative.§

I do not maintain that these figures show that in every case or even in the majority of cases where craniotomy was performed Cæsarean section should have been the resort. They only indicate how much wrong has resulted from sophistical reasoning—how the perforator has been resorted to, when delivery is difficult, instead of perseverance with the forceps, turning or some other obstetrical manœuvre.

As a conclusion of the ethical question, I will allude to the position held by the Catholic Church, which has so thoroughly considered the points involved. It is clearly defined in the letter appended, from the pen of a distinguished Catholic theologian of this city:

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*Barker: *Amer. Jour. of Obstetrics*, January, 1878.

†Chamber's Encyclopedia—"Vital Statistics."

‡The deaths of mothers resulting from craniotomy vary according to different authorities. Churchill says, "one out of every five and one-half. Rokitansky, assistant to Braun, of Vienna, gives 40 per cent. in 193 cases (Parry). Max Wiener in 101 cases at Poliklinik. Breslau gives a death rate of 25 per cent. (*Amer. Jour. Obstetrics*, January, 1878, p. 190.)

§D'Espine gives the mortality of mothers per 1000 deliveries as follows: Geneva 8.7; Belgium 6; Prussia 7; England, 1838-1841, 8. to 8.8., 1847-1850 at 5.6. (*Pathologie und Therapie des Wochenbetts*, von F. Winckel, Berlin, 1869, p. 21).

CATHEDRAL, January 30, 1878.

DEAR DOCTOR,—In compliance with your request, I send you the following note on the teaching of the Catholic Church in regard to craniotomy and the Cæsarean operation:

1st. *Craniotomy.*—This subject needs but few words. In the long, almost endless, list of authors regarded as teachers of Catholic theology, there is not one who does not condemn the practice. In the teaching of the Catholic Church, to destroy the child directly and wilfully, as this practice does, to save the life of the mother, is a sin of murder. On that point there is one invariable teaching. Some years ago a Catholic writer undertook to defend the practice, on the ground that it was not *murder*, because the child was an *unjust* aggressor on the life of the mother, but the teaching was immediately condemned by the Holy See. The logic on which the opinion rested, is seen at a glance to be absurd. The child is not a *free* agent in the womb, but *freedom of will* is necessary to make any one guilty of *unjust* aggression. The child or fœtus is therefore *innocent* of all injustice. It has a claim to its life which no one can attack without guilt.

The Cæsarean Operation.—In looking over theological authorities on this subject, I find frequent mention of its success upon living subjects, cited by Catholic theologians and gathered from the medical statistics of France and other countries. They inform me that the operation was successful in more than two-thirds of the cases in which it was performed, though these included many in which it was not tried until the life of the patient was almost despaired of.

If a case is supposed, then, in which an experienced surgeon is prepared to undertake the operation while it is certain—1st, that the danger to the mother's life is not increased by it; and 2d, that it is the best, if not the only chance of extracting the infant alive, Catholic theologians hold that the mother would be plainly bound in charity to her infant to submit to it. Some few say she should be earnestly exhorted to do so, but not compelled under pain of being refused the sacraments. Better leave her in *bona fide*. The common opinion of Catholic theologians is that the mother is not bound in *justice* to submit, but is bound *in charity* to her child, to allow the operation, since the history of science shows most conclusively that the life of the child is far more frequently saved than lost. In performing it there is no fault against Catholic doctrine as in the other operation; on the contrary, it is in the strictest accord with Christian teaching. Respectfully, ———

Finally, to what cases is Cæsarean section applicable? There is certainly no way of determining this point except by the statistical method, notwithstanding the taunting way in which the noted obstetrician, Barnes, refers to it; maintaining that unsuccessful cases of section are not reported, and speciously declaring that "we cannot recognize fatal cases of craniotomy in extreme deformity, say of conjugate diameter reduced to 2 inches or $1\frac{3}{4}$ inches, un-

less the operation was begun under selected circumstances."* If he, and others of like persuasion, had labored as assiduously to perfect the Cæsarean operation as they have to invent instruments for destroying the child, their opinions would be worthy of more consideration. Persons who hold these views seem to forget the axiom of statisticians, that an extended series of errors correct themselves, that by a peculiar law of the intellect there are always as many mistakes on one side of the account as on the other. If we ignore these facts and demand mathematical accuracy, we may as well throw aside all statistics and fall back on vagaries of the imagination as was done in the dark ages.

What are the figures? Sprengel writing in 1815, says, "the number of examples of women dead by hysterotomy is about equal to those of persons who have been saved thereby."† And it would seem that this statement represents very nearly the results even now, if we include all the cases; that is, those that are operated on at an early stage of labor and previous to other manipulations, and those in which the operation is delayed for several days, and all other resources are first exhausted. The latter class of cases are well represented by the statistics of British surgery, which, according to Bedford, show a loss of 86.67 per cent. in ninety-eight sections. However, figures showing the result of the operation as a last resort have no bearing on the question of its merits as a life-saving operation when performed at an early period of labor. This aspect of the case is well shown by the statistics collected by M. Pihan Dufeillay‡ Of eighty-eight cases operated on, 81 per cent. recovered when section was made early. As specially applying to the United States, I refer to seventeen cases of women operated upon during the first day of labor. Harris§ reports of these 73 $\frac{1}{17}$ per cent. of mothers saved, all the children but one born alive, and 86 $\frac{2}{3}$ per cent. of them continued to live.

Now let us turn to craniotomy statistics. We must discriminate between the sort of cases in which this operation is performed. It will not do to compare the results of craniotomy in comparatively capacious pelves in which the instruments were managed with ease—cases in which the operation is never justifiable if the child be living. On the contrary, we should place, side by side, those cases of craniotomy in which the pelvis is so much contracted that it offers the only hope for the life of the mother exclusive of Cæsarean section. For this purpose, in an

*Barnes' Obstetric Operations, p. 323, London, 1870.
†Historie de la Medicine, Paris, 1815, Tome VII. p. 311.
‡*Archives de Medicine*, Paris, 1861. Vol. II, p. 316.
§*Am. Journ. Obstetrics*, Vol. IV, p. 663.

admirable paper on this subject, Dr. Parry* has tabulated the results of seventy cases of craniotomy, in which the antero-posterior diameter of the superior strait was two and a half inches or under. "Of these 43 or 61.43 per cent. recovered, and 27 or 38.57 per cent. died." These figures are undoubtedly reliable, and represent the subject in a startling light. It may occur to some that seventy cases are not sufficient for concluding as to the morality of craniotomy in contracted pelves. But it is an immense number when we reflect on their excessive infrequence. The late distinguished Prof. H. L. Hodge, in reply to questions on this subject, in 1872, said: "In a practice of more than fifty years, deformities to this extent (2½ inches and under) have not occurred to me."† And that skillful and experienced obstetrician, Professor Fordyce Barker, of New York, in the January number of the *American Journal of Obstetrics*, states that in a private practice of twenty-five years, he has never had occasion to resort to craniotomy, and in twenty-two years of service in Bellevue Hospital four times. As to the life of the mother, we find, then, a difference in these cases of twelve per cent. in favor of Cæsarean section according to the statistics of Harris, and twenty per cent. according to the figures of Dieufally.

There yet remains to be decided the alternative in contracted pelvis when the antero-posterior diameter exceeds two and one-half inches. Obviously many cases of the lesser degree of contraction terminate spontaneously. Many others are satisfactorily terminated by the forceps or turning. Dr. W. H. Jones, of London, in a monograph on the "Management of Labor in Contracted Pelvis," has endeavored to decide this question; but the number of cases upon which he founds his conclusions are not sufficient for the purpose. However, it may be stated in general terms that he opposes craniotomy where the antero-posterior diameter is two and one-half inches and under.

To show how great a change has taken place in the views of skilled obstetricians, I will quote from one or two authorities. Bedford says:‡ "If the child be alive, the woman at the completion of her pregnancy, and it be made manifest that the maternal passages are so contracted as to render it physically impossible that a living child can be extracted *per vias naturales*, I should, between the two resources—craniotomy and the Cæsarean section—not hesitate to decide in favor of the latter."

Prof. T. G. Thomas says:§ "I am perfectly willing to admit that many cases in which craniotomy has been resorted to in the

*Parry on Craniotomy and Cæsarean Section, N. Y., 1873, p. 32.
†*American Journal of Obstetrics*, Vol. VI, p. 110 and 111, 1873-74.
‡Practice of Obstetrics, N. Y., 1862.
§*Amer. Journ. Obstetrics*, 1871, Vol. III, p. 125.

past would have been more appropriately treated by this operation (Cæsarean section), and I as firmly believe that in the future the Cæsarean section will be more frequently resorted to and with better results, for the reason that progressive obstetricians appreciate and admit these facts."

Playfair in his recent work* says: "A consideration of such facts has led several recent writers in this country (Great Britain) to recommend that the latter operation (Cæsarean section) should be performed in the cases under consideration (contracted pelvis)—not because they consider craniotomy impracticable, but because they believe it to be quite as dangerous to the mother, with the further drawback of necessarily sacrificing the child. * * * We believe, however, that if it were carried into practice, we should save many a future life, while we should in no way increase the maternal mortality."

Conclusions—1. In the case reported, Cæsarean section was justifiable as the result proved.

2. Cæsarean section should be resorted to in all cases where the antero-posterior diameter of the superior strait is two and one half inches or under, and gestation has advanced to the ninth month.

3. Every effort should be made to perfect the operation of Cæsarean section, and its use in the cases mentioned encouraged.

4. Craniotomy should be discouraged, and its use restricted to the narrowest possible limits.

Dr. Walton's paper coming up for discussion, Dr. J. L. Cleveland remarked that while he was not willing to endorse fully the grounds taken by the essayist in regard to the Cæsarean section, he fully endorsed the operation in the case reported. From the character of the deformity and from the circumstances which have been narrated by the essayist, the section was surely the proper proceeding, for the exhaustion incident to craniotomy (for it would have been a tedious operation), and the injury which it seems to me must have been inflicted upon the soft parts, would have destroyed the life of the mother beyond peradventure, for the patient was very feeble. Though the patient died, still, viewing the operation in all its details, it was a practical success.

A case happened in my own practice some four years ago, in which Cæsarean section ought to have been performed, where the antero-posterior diameter was perhaps two and one-half or two and one-quarter inches. Unfortunately, turning was resorted to; this necessitated decapitation before the perforator and cephalotribe could be applied and the head finally delivered.

*Obstetric Operations, p. 141-2.

Six hours were consumed in these manipulations. Our patient never rallied. I am confident in this case if the section had been resorted to the child would most probably have been saved, and perhaps the mother. Every case should be most carefully examined, and if the forceps or turning are evidently impracticable, then if craniotomy can be performed with safety to the mother, it should be selected. Unfortunately, cases frequently occur where the points above stated cannot be determined, except by experiment, and this is always dangerous.

Dr. Tate said there are two conditions in which the propriety of this operation is brought into question: 1st, where the capacity of the pelvis is so small that a live child cannot be delivered; 2d, where during labor the uterus has been ruptured, and the child has escaped into the cavity of the abdomen.

The operation of Cæsarean section must be considered in comparison with embryotomy; for one of them must be resorted to. Embryotomy, as statistics clearly show, is very severe upon the mother, and often fatal: of course it necessarily destroys the child. The doctor referred to Meigs' case, where embryotomy was twice effected after protracted efforts; in one case lasting nearly two hours. The same woman was successfully delivered in the third and fourth labors by Dr. Gibson by Cæsarean section. In both cases the child and mother were saved. In Richmond, Va., two physicians attempted to deliver a woman with contracted pelvis at full term. Finding the case did not admit the use of forceps, they attempted to perforate the head, but failed after protracted effort, on account of the narrowness of the pelvis. They then tried section and with entire success to the mother and child. A case is reported in Paris, where the woman had puerperal convulsions; after the mother's death the child was delivered alive.

2d. Uterine rupture. Some authors treat of this under gastrotomy; but the speaker thought it properly belonged to the subject of Cæsarean section, because in this case nature, in her endeavor to expel the child, has ruptured the uterus and leaves to the obstetrician the necessity of opening the abdomen and removing the contents. This operation is to be viewed in contrast with turning and delivery in the natural way. But in these cases, where the womb is ruptured and the child is in the abdomen, the amniotic fluid and blood must naturally escape into the cavity, resulting in the death of the mother, and the child also, if not speedily delivered. There are cases recorded in which in attempting to deliver by turning, the intestines have been torn; and other cases where the arms have separated, and been caught over the sides of the uterus, and thus prevented all efforts to

deliver. In the speaker's opinion in all cases where the child is clearly in the abdominal cavity, whether alive or dead, the abdomen should be opened and the child delivered. Even in cases where the child may be delivered with comparative ease, the escape of fluid into the cavity will produce subsequent inflammation and loss of the patient.

Dr. James T. Whittaker thought the question, whether the operation should be Cæsarean section or embryotomy, depended upon the life of the child and the diameter of the pelvis. If the conjugate measured 2½ inches or less, the operator might resort to section. If it was above 2½ inches, perforation and extraction would be the only operation justifiable. Embryotomy, in skillful hands, is in no way a dangerous operation to the mother, whose interests and life are always paramount to those of the child. Cæsarean section is always, and must remain, however much the method be improved, the most formidable operation in medicine. It is so from the nature and danger of peritonitis in the human subject. It is fortunate that the induction of premature labor offers us an easy solution to these dreadful cases; but it is unfortunate that in most instances the operator is called in too late for its execution. It is nothing gained to save a child and lose a mother, for then the child dies anyhow. The truth is, in most cases where the question is directly at issue, the child is dead already; other efforts made to effect delivery have crushed out its life, or uterine tetanus has blocked the utero-placental circulation. One must be strangely prejudiced in favor of operations to practice Cæsarean section to secure a dead child. As to statistics, they amount to nothing; one may collect what statistics he pleases; the question is entirely individual to every case. In this case both died—the mother in seventeen days, the child in two. Who could say what chance the mother might not have had if embryotomy had been substituted for Cæsarean section? In the case as presented, however, it is probable that maternal death was inevitable in any event or after any operation. The only chance lay in the induction of premature labor, even before the age of viability.

Dr. Thad. A. Reamy said: There are two things in regard to the case which I think are to be regretted. First, that with a conjugate diameter of but 2 inches, and almost an equivalent abridgment of the transverse diameter, as reported, the fœtus being at full term, any attempt should have been made to deliver with the forceps. Who does not know that delivery by any mode, short of mutilation of the child, *per vias naturales*, would, under such conditions, be impossible? Then why subject this feeble girl to the delay, pain and useless fatigue of such an experiment?

This inquiry gains additional force, if it were possible, when it is remembered that she was afterwards to be subjected to the perils of Cæsarean section. The second item of regret is, that after she was so skillfully and successfully operated upon, and under all the circumstances showed such marvelous endurance, she could not have been placed under better hygienic conditions and had better nursing; for it does not appear after all, but that the fatal end was due to bad nursing. In these remarks I make no reflection upon the gentleman who had charge; no doubt but the circumstances were beyond his control. I pass by the question as to the possibility of applying the forceps in a case where both conjugate and transverse diameters are so diminished as was the case here. I leave entirely out of consideration cases where the mother has suddenly died and operative procedures are had for the delivery of a yet living child. So, also, do I leave all cases (except by way of illustration) where the child is dead and no interest is to be considered but those of the mother. The question relates simply to cases of pelvic deformity demanding craniotomy of a living child, or the Cæsarean section as operations of election.

It is a general rule with obstetricians in this country to follow the practice of our English brethren in regard to craniotomy. The child being alive, the complications such as to render either craniotomy or the Cæsarean section imperative, craniotomy is adopted without hesitation, provided the pelvic deformity is not so great as to render delivery after this method impossible. There are but few among us who do not conform to this rule. Though not exclusively, yet generally those who do not, are restrained by special religious teaching.

For those who oppose craniotomy in obedience to special religious views, I have profound respect. To my mind, the ethical objections to the practice except in special cases of necessity, are included in the same law which forbids us to kill others. This law speaks to me with equal authority for all, demanding sacredly the protection of the life of the unborn child if within my power. Shall I, then, instead of heeding that demand, deliberately destroy the child under the pretext that I consider the mother's life of so much more value than the child's, as to forbid her subjecting herself to some extra risk for its safety? Mind you, the case is not one demanding the sacrifice of her life necessarily, not even so much as equal chances against her. It is, in my opinion, high time obstetricians were brought more fully to consider the nature and weight of the responsibility they assume when deciding to destroy a child rather than allow the mother to exercise toward it that charity which she owes to it, taking some

risk for its welfare. If the case were one where, by the hand of the accoucheur, the life, either of mother or child, must be taken, the one to save the other, the circumstances would be quite different. Here the physician would be compelled to chose between the rights or the value of two lives placed in his hands—weigh the one against the other.

There are but few, if any, who would not under such circumstances decide against the child. Not, of course, on the grounds of justice, for it is a victim who has committed no crime and has had no agency whatever in its present position. But the decision would be made in charity to the mother, and in keeping with conceptions of her immediate greater value to society, to her family, etc. Chiefly, however, we would be prompted by our greater sympathies for her. Our holiest and best natures would prompt us to our best skill to save her from the mental agony of meeting death. The contemplation of immediate death is to most persons a source of terror. This is, probably true, without any regard to questions of faith or expectations as to good or evil in the hereafter. All this agony the child escapes. Now, I think the fallacy lies here; accoucheurs and writers weigh their duties and reach their conclusions in deciding between the Cæsarean section and craniotomy, just as though choosing the Cæsarean section or urging its propriety upon a woman, were asking her to give her life for that of the child. As has been shown by Dr. Walton's report, and as is well known to all, this is not true. She is only asked, as above stated, to assume for its safety extra hazard. Her chances of recovery, if she assumes this hazard, are at least 60 per cent., and the chances for her child almost, though not quite, so good as under the ordinary perils of natural labor.

As a result, probably, to a great degree at least, of this false view of the subject, the life of the child has come to be considered of but little value practically. Annually many children are sacrificed who could be saved, and the mothers also. As the result of the foregoing we hear on all hands: "vegetative life," "frail life," "undeveloped life," "sinless life," in the one scale. On the other, "wifehood," "motherhood," with all the inexpressible interests that these things imply. And thus the course is easy.

Dr. Robert Barnes (*Obstetric Operations*), speaking of the Cæsarean section as an operation of election says: "It is regarded by some enthusiastic practitioners, dazzled perhaps by its false brilliancy, as an operation deserving to be raised into competition with turning, craniotomy or cephalotripsy. At different times and in different countries it has been looked upon with

favor, because promising salvation to the child. The child is weighed against its mother, and conscience is silenced with the reflection that the possible or probable rescue of the child may be rightly purchased by subjecting the mother to the most imminent peril. It is held that this double chance, made up in favor of the child and against the mother, is preferred to the single chance afforded by an operation which gives up the child for the sake of odds in favor of the mother." "The situation," he adds, "is painful, and may well perplex those who are not steady in their allegiance to those moral laws which ought to rule over all professions, and which certainly recognize no exception here." It cannot be now claimed that Dr. B. is warranted in the assertion that women who submit to the section are thereby necessarily in imminent peril.

The statistics of Dr. Harris, quoted by Dr. Walton, are no doubt too favorable. Still we may not be forbidden to add to their testimony the cases which have been known to have occurred in this city, four of them under the observation of members of this Academy; and these local cases have shown as favorable results as claimed by Harris. I have already verbally reported a case occurring in this State, where a country practitioner performed Cæsarean section with no instruments but those found in his pocket case; mother and child doing well. At any rate we are warranted in assuming for the Cæsarean section, early done, and by skillful operators, 60 to 65 per cent. of success; and this in all classes of subjects. And with a more general adoption of the operation, leading to better preparation for, and increased skill, and better methods of its performance, there can be no question that the mortality will be greatly diminished. The striking contrast between the statistics of France and England warrant this view: for the wonderful difference in favor of French operators cannot be set down to their superiority over the English.

But even with present results, I am unable to appreciate the remark of Dr. Barnes, which guarantees from perplexity all such as are "steady in allegiance to moral law," provided they will consent to destroy the child and thus save the mother from risk. It seems to me the question of "quieting the conscience" presents itself from quite a different stand-point.

With these facts before us, who could hesitate in deciding that it is the plain duty of the accoucheur, so far as the ethics of the question go, to perform the Cæsarean section instead of craniotomy, where the question is one of election and must be met? In this connection, I wish to say that I do not think the fact that the mother may be suffering at the time of a mortal disease,

which must sooner or later terminate her life, renders her life any less to be considered as a matter of value to her, and, therefore, that she is to be considered under greater obligation to offer that depreciated life for her child. If considered at all, it should be in its bearing upon the probabilities of lessening the chances of the mother to bear the ordeal of the section. I do not think such a view is consistent, and therefore, it is not necessary. The case here is not by any means parallel with one where the disease is a mortal one in a woman not pregnant, and surgical interference is instituted as a forlorn hope in the interests of her life alone.

The statistical arguments by which Dr. W. attempts to show that delivery by the Cæsarean section is as safe, if not safer, to the mother, as delivery by craniotomy, cannot be accepted. Let us examine the question for a moment.

All statistics, on any subject whatever, are to be accepted with caution, and studied with great care, if we would obtain from them the truth as to that of which they testify. On medical subjects they are peculiarly liable to mislead. By way of illustration, I refer now to some statistics of apoplexy. Hammond observed 250 cases, and Falret, of the Salpétrière, 2,000 cases, and as the result of their investigations, apoplexy was more common with males than females, while Althaus, of London, with reports from the Registrar General's office as to a quarter million cases of apoplexy, drawn from the kingdom of Great Britain and covering many years, makes the deduction that apoplexy is more common in the female than the male. Where reports are accurate with regard to sex, and such divergent conclusions are reached, how can any one pin his faith to statistics? Now, as to the statistics of craniotomy. First. The sources of these statistics are not reliable. Second. The operation has often been performed by incompetent operators. Third. Every man knows as to the statistics of this operation that they are invalidated by the fact that craniotomy is performed as a *dernier resort*. Labor has been in progress a long time; the uterus has been riding upon the pubic bone or sacrum, and is ready to slough from the pressure. The case is often attended by an accoucheur who does not recognize the deformity, and to make the matter worse, very often the forceps have been applied, and long and violent traction made. These things are so true that the operation of craniotomy must not be blamed for the mortality attending it. The same objections can be urged as to the statistics of Cæsarean section, but this does not, as we have these statistics furnished us, improve in any degree the comparison. The only way that statistics of reliability can be obtained

as to either operation is to proceed with the operation at once, so soon as the labor has set in, either naturally or induced, and complete it without subjecting the woman to any other perils than those necessary to the operation and its consequences. This is equally true of each operation in question.

With a conjugate of not less than 2 inches, or even 1¾ inches, the transverse not being greatly abridged, the fœtus can generally be extracted piecemeal without much injury to the mother. The argument against craniotomy, that it is as dangerous to the mother as Cæsarean section, is unsound. Under the conditions named, it is infinitely safer. Is there any man here or elsewhere who would or does perform the Cæsarean section in preference to craniotomy in a case where delivery can be performed by the latter method—the child being dead? If not, why not? Manifestly because craniotomy is the safer method to the mother, and the child being dead, has, of course, no interest to be considered. So far as the operation itself is concerned, any one must know that the section is much easier of performance for the operator than craniotomy above the brim. I think, therefore, the arguments of Dr. Walton, founded upon statistical grounds, claiming that the section is as safe to the mother as craniotomy (excepting of course cases of such exaggerated deformity as to render craniotomy next to impossible), cannot be accepted.

I have referred to the degree of deformity rendering craniotomy impossible. It is possible with much greater abridgment in the conjugate diameter than is admitted by some of the speakers to-night. All will remember that Dr. Barnes has, by his new method of embryotomy, described in his admirable work (*Obstetric Operations*), succeeded in extracting a child through a conjugate of but an inch.

I saw in consultation last year, in this city, a woman with a conjugate of certainly not above 1½ inches, caused by exostosis of the upper portion of the sacrum, the transverse diameter not being at all lessened, but ample. The woman had been in labor when I was called, twenty-four hours. Attempts at delivery with forceps had been made. The child was dead. I removed, in the presence of gentlemen, who are present, a fully developed child. In this case I removed all the cranial bones, protecting the soft parts of the mother from injury by the scalp of the child. In like manner all the cervical vertebræ were, after section with heavy curved scissors, removed with the proper long jawed forceps. Likewise the lungs, heart, liver and part of the intestines were removed—the fœtal integument all the time protecting the mother's tissues from violence. The fœtal pelvis was delivered by crowding it to one side of the prominence and dragging

through the lateral space. Of course, where there is transverse contraction, as well as conjugate, these manipulations cannot be so well accomplished. The woman recovered rapidly.

I refer to these cases, not for the purpose of discussing the best methods of performing craniotomy. Neither are the methods of operating for craniotomy or the Cæsarean section before us. But I speak with the assurance of personal experience in asserting that craniotomy is not necessarily very dangerous to the mother, even with great pelvic deformity. I have made the operation many times, the child being dead when the operation was commenced, and in the earlier years of my practice sometimes when the child was living. In but a single instance has it been followed by the death of the mother. I oppose it, the child being alive, except as a dire necessity in cases which are very few in the lifetime of the man, on other grounds than its dangers. I am warranted in that opposition from the considerations growing out of the act itself and its consequences. And I think myself specially justified from the promise of safety to both mother and child in Cæsarean section. Fortunately, the induction of premature labor, now practised by every skillful obstetrician in cases of pelvic deformity not below 2½ or 2¾ inches conjugate, where the case is known to the physician beforehand (a practice safe to mother and comparatively safe for the child), will make the cases demanding either craniotomy or the Cæsarean section much rarer than formerly. No achievement of modern obstetric science has been more brilliant than this—bringing life and safety to mothers and children, and relieving the accoucheur from the decision of questions which, if he be a man of refinement and conscience, gives him pain and anxiety.

Dr. Walton, in concluding the discussion, remarked: The only question to be decided in this matter, it seems, is, when is the contraction of the pelvis such that the dangers of craniotomy and Cæsarean section are equal, so that the life of the mother and the life of the child shall be thrown into the scale to swing the balance? As I have already stated, this can only be decided by statistics. But, gentlemen say we shall not appeal to statistics—that they are valueless, because unsuccessful cases are concealed and successful cases only are reported. Such reasoning as this would invalidate all statistics. I maintain that for every mean, ignoble man who conceals a case because it is unsuccessful, there may always be found one generous hearted, but careless man who, from want of time or want of method, does not trouble himself to report even his successful cases. If we go back to the history of ovariotomy, we find exactly the same arguments used by the incredulous against this operation. Ephraim McDowell,

in the backwoods of Kentucky, made his operations and told of his successes, but they would not be believed. He was reporting successful cases and concealing unsuccessful cases. Subsequently, Clay, in the country districts of England, was doing the same thing, according to his cynical confreres. And it was not for some years after that the scientific surgeons of London, Philadelphia and New York, found that these comparatively obscure men were telling the truth, and that in this bold surgical operation—ovariotomy—which in so many respects resembles Cæsarean section, seventy-five per cent. of patients may be saved. So now when a reliable man, Harris, of New York, collects reliable statistics of patients operated upon on the first day of labor by Cæsarean section, and shows that under these circumstances seventy-three per cent. may be saved, he, too, is falsifying facts—he, too, is concealing unsuccessful cases in the interests of a preconceived opinion—notwithstanding he tells us that he has found more difficulty in securing data of the successful cases than the opposite.

Now, it is already clearly shown by Parry that in craniotomies where the conjugate diameter is two and one-half inches, there is as much danger from craniotomy as Cæsarean section, and that the danger from craniotomy increases in direct proportion as the conjugate diameter decreases, whilst the danger from section remains exactly the same—always under these circumstances but 27 per cent. when the patient is operated on the first day of labor—whilst the mortality from craniotomy increases from 39 per cent. upward. Certainly it would be well if we had the statistics of a larger number of sections made on the first day of labor, but because we do not have them—because some medical Diogenes demands 500 or 1,000 cases before he will believe—shall we go on continually in the slaughter of infant life resulting from the promiscuous use of the perforator? Let us apply the facts before us.

70 craniotomies, 2½ inches and under 140 lives involved.

Mothers recovered, 61 per cent.,	43
Children——,	0
Total lives saved,	43

70 Cæsarean sections, 1st day of labor.

Mothers recovered, 73 per cent.,	51
Children saved, 86 per cent.,	60
Total lives saved,	111

Difference in favor of section, 68 lives.

Now turn to the results in England following the cultivation

of craniotomy as an art and the abrogation of the moral law which requires us to remember the child. In that country there were 712,684 deliveries in 1864 (Chambers, *Cyclopedia*). At the same rate in ten years the total deliveries would be 7,126,840. Craniotomy once in every 300 deliveries (the books show it has been performed more frequently) gives a destruction of 23,756 children, whilst according to the German practice craniotomy would have been performed only once in 1,700 cases, that is 4,192 times; making a difference as against the English method of 19,320. But in these 23,756 craniotomies the children are not only destroyed, but one out of every five mothers die, that is 4,750, or a total of 28,506 deaths resulting in great part from the art of craniotomy. When we reflect that this same sort of work is going on continually in this country, that craniotomy is frequently performed where the patient is afterwards delivered of children by the forces of nature alone, we may be well startled at the magnitude of well meaning medical crime.

Music as Mind Medicine.—The New York *World*, of March 6th, gives a detailed account of the fifth series of experiments made with music to control the insane in the Asylum on Blackwell's Island. From the days of David to this, music has been known to work wonders with minds diseased, but so far as we are aware, it has remained for the New York authorities to make systematic experiments with the agent. On March 5th, Mr. J. W. Pattison, the distinguished pianist, assisted by Downing's Ninth Regiment Band, of forty performers, accompanied by several physicians, visited the Island to make and to witness the results of this fifth series of experiments. The most stubborn chronic cases in the Asylum were selected as the subjects for the experiments:

No. 1. Female, in Asylum nine years for chronic mania. Prognosis always unfavorable—being subject to frequent recurrence of violent paroxysms. She was in a violent mood when brought out. Mr. Pattison first exhibited a heroic dose of Beethoven's Funeral March. Under its solemn and tranquilizing effect, the patient grew quiet in one minute, and began to smile. Her pulse was 120 when she was first introduced to the music, and at the end of the first minute it had noticeably abated in frequency, although the exact pulsation was not recorded. Two minutes passed and she became violent again. Pianissimo passages of the music were then played, and she became so quiet that she chatted somewhat intelligently with Mr. Pattison. Her pulse then was 100. Other music of a livelier sort caused a

swifter pulse and less rational behavior. The verdict of the doctors was that she was a good subject for musical treatment when administered in doses intelligently given. On the whole, the experiment, as to her, was not considered satisfactory, although on a previous occasion music had lowered her pulse from 150 to 80.

No. 2. Female, age 35 years; in Asylum three years for chronic mania; probability for recovery very doubtful. At times violent, and is subject to tremors; she added profane abuse to her habitual manifestations when brought out. When Mr. Pattison began a plaintive nocturne by Chopin her pulse was wiry, but became fuller almost at once. She soon began to talk sensibly and coherently. An adagio by Beethoven added to the tranquilizing effect, and after such familiar airs as the "Old Folks at Home" and "Home, Sweet Home," her skin became warmer and her nervousness passed away. The woman was sent back to her quarters without the straight jacket in which she had been brought to the hall. This was regarded as a very successful experiment.

No. 3 was a noisy, incoherent and spasmodically violent Irish woman of thirty-six, who had been for a year under treatment for mania. She was quiet when first subjected to the musical influence, but under "The harp that once through Tara's halls," her pulse jumped from 80 to 104. Still, she had been stubborn and abusive before, and an interval of good-natured loquacity was regarded by the experts as an improvement in her condition. She took great interest in "Kathleen Mavourneen," became quieter and more tractable and went back to her cell in a quieter humor than she had shown for months.

No. 4 was a woman of twenty-eight, afflicted with puerperal mania for a year. She was violent on being taken into the presence of so many strangers, but under soothing music she forgot her self-consciousness and her pulse gradually sank in frequency from 130 to 115, below which no music could reduce it.

No. 5. A victim of temporary mania and incipient melancholy, aged forty, and three years under treatment, was passive, and noticed nothing when introduced into the clinic; still her pulse was very excited. The music so charmed her that when she was released from the experiment her pulse had attained the comparative quiescence of eighty-four beats.

No. 6 was a woman of thirty-two, whose chronic mania it was thought could not be alleviated. Under previous musical trials her insanity took a religious character. She then fell upon her knees and wept vehemently. Yesterday the same tunes that had before awakened her intelligence again produced the same effect. The improvement lay in the circumstance that she re-

fused to kneel. "I will not kneel unless Mr. Cook is here," she said, and so she prayed standing. Mr. Cook was her pastor. She is a German woman, and the music that stirred her so consisted of familiar German tunes.

No. 7. By far the most interesting experiment was upon Martha Porter. She is comely, about thirty, and when taken to the Asylum was in a condition of seemingly hopeless melancholia. No treatment effected any change for the better in her downcast expression and voiceless apathy. Her natural cravings were gratified in the perfunctory fashion of an automaton. She had been subjected to the musical treatment with the most hopeful results yet achieved. The first dose, so to call it, aroused her interest enough for her to notice surrounding objects. The second still further awakened her intelligence, and with the third came a childlike affection for the genial and colossal Commissioner Thomas S. Brennan. Her days are spent in counting the hours she must be away from him, and she shows a babyish delight whenever she is near the Commissioner. She occasionally replies to questions addressed to her by others than the Commissioner, although this is not usual unless she hears the music which first aroused her interest. Yesterday she so far recovered that she chatted sensibly with whoever addressed her, and so long as she heard the music was in a state of exultation.

Two other most valuable experiments were upon cases of dementia complicated with a condition resembling catalepsy. Both patients were totally indifferent to external conditions. To all intents and purposes, excepting that they existed, they were dummies. Mr. Pattison dosed them with the "Rhapsodie Hungrios," and afterwards with the "Cradle Song." Their pulses changed from 80 to 84, and the temperature showed marked improvement, although the cataleptic condition was not removed.

The experts summarized their conclusions from their observations as follows:

1. Instrumental music has, in some cases, a temporarily good effect, which varies with the nature of the music and its adaptability to the temperament of the patient. These qualities granted, music tranquilizes the violent, soothes the nervous, makes the stolidly melancholic chatty, cheerful or disposed to weep, the latter being regarded as a symptom of improvement.

2. That in all probability these effects of music may be made permanent by continuous treatment adapted to the individual cases, administered in properly regulated doses.

By far the majority of the patients were the victims of stolid, apathetic melancholy, which masked their faces impenetrably at first sight. Here and there were noisy, chatty or turbulent

maniacs, but they made only an insignificant showing among the mass of hopelessly obscured minds. The faces of the majority brightened under an air from Mendelssohn. The overture to "William Tell" had even a more powerful effect. Very few even of the most apathetic remained unconcerned, and when a strong strain was rehearsed there was a buzz among the maniacs that sounded like the chattering of many teeth. They had caught the very spirit of the music, and were its subjects. Following this were marches and martial music, under which a number of the patients became almost too excited to restrain themselves, although they were not violent. They were let down gradually from this state of exhultation by dancing music and other light music until it was thought safe to try the effect by singing.

Mr. A. E. Stoddard sang to an audience as quiet and attentive as he could desire "The Jolly Raftsman," and in encore, "The Heart Bowed Down." The lunatics applauded him to the echo.

After the "Postillion Waltz," by the orchestra, Miss Annie Borie sang, first Pattison's "Waltz Song," and in response to an encore, "Beware!" The patients received both songs enthusiastically, so much so that the orchestra was prompted to try the soothing effect of the medley, "Echoes of Killarney."

The concert proper was ended by Miss Rosetti, who sang a waltz and "Ave Maria" with such expression, that the patients became wildly clamorous for a dance. The indulgence was granted, and after the seats had been removed, the floor was crowded with dancers. Jigs and polkas put life and mettle into heels that had not kept time for years before. Old and young, the hysterical and the melancholic, the violent and the stolid, quadrilled and waltzed in ecstasy of excitement for half an hour. Finally, at the order of Dr. Strew, they paired off and marched to their wards without any demurrer or manifestation of insubordination.

Vomiting of Pregnancy Successfully Treated by Caustic Applications ot the Cervix Uteri.—During the attendance of Dr. J. Marion Sims upon the session of the American Medical Association in Chicago last June, he met with Dr. M. O. Jones, of Chicago, who incidentally related his experience in the treatment of the vomiting of pregnancy. Dr. Sims thought the matter of so much importance that he begged Dr. Jones to write out his experience for publication. He received Dr. Jones' paper just as he was about to leave home for Paris, where he now is, when he did not have time to arrange for its publication in America. Hence he contributes the paper to the London *Lancet*, of February 23d, 1878.

Dr. Jones's paper begins by detailing well known facts to every practitioner regarding the susceptibility of pregnant women to nausea, vomiting, etc.; the period of commencement and termination of this tendency, and describes the violence of the symptoms—in some cases even requiring the induction of labor, or in other cases causing death, etc. He reviews, in the next place, several of the theoretical suggestions which have been made as the cause of the affection, and the plans of treatment which have accordingly been recommended, such as the dilatation of the cervix, the correction of flexion of the uterus, etc. Dr. Jones, however, thinks the trouble is purely a reflex phenomenon, and makes some very practical remarks on the subject. He says:

As to the treatment, we know how unsatisfactorily have been our efforts to relieve this affection by the exhibition of drugs. I do not allude to the mild cases which require but little or no attention, but the excessive and persistent cases of vomiting, where the patient, in spite of all remedies, continues to grow day by day more feeble and emaciated. It is wonderful the number of remedies which have been suggested by different authors and contributors. Purgatives, emetics, anti-emetics, vegetable and mineral acids, alkalies and antacids of various kinds, antispasmodics, narcotics of every variety, internally, externally and hypodermically administered; tincture of iodine in minute doses, oxalate of cerium, effervescent nitrate of cerium, aconite, various effervescing draughts, bismuth, strychnia, etc., to the end, with varying success, sometimes with no success at all. Believing that the vomiting of pregnancy is a reflex phenomenon, is it not strange that nearly all our efforts to relieve it have been mainly directed to the stomach, the helpless sufferer from the fault of another organ? Why not direct our curative or corrective measures directly to the source of mischief? Impressed with the correctness of this idea, I decided to put it in practice in the first case that might come under my care.

It has been now six years since my first opportunity of testing this idea, and within that time I have treated five cases, and in each case a very gratifying result ensued. I thought by exciting an irritation or superficial inflammation of the os and cervix uteri, the reflex nervous phenomena would be concentrated at the point of irritation, and thereby relieve the stomach.

To the first patient I applied the solid nitrate of silver to the os uteri only. The benefit was very noticeable within twenty-four hours. Being somewhat apprehensive, I applied the caustic rather sparingly, and in a few days applied it again, obtaining still greater relief. I used it a third time, but suspect the third application was really unnecessary. The patient remained free

from sickness or vomiting to the end of gestation. To the second case the caustic was applied twice only. Improvement followed the first, and complete relief the second application. The third patient required but one application; it was used more freely than in the preceding cases, and applied to the os and a portion of the cervix uteri. The fourth patient needed but one application, and this was one of the most harassing and persistent cases of vomiting that ever came under my care. The stomach rejected everything taken into it, and the patient grew feeble, and became so emaciated that she was scarcely able to leave her bed. The caustic in this case was very freely applied to the os and vaginal cervix. The relief obtained was beyond my expectation, for it was almost immediate. She vomited only twice or thrice in the thirty-six hours following, and no more after that time. She was able to retain food; assimilation was good, and she gained rapidly in health, strength and flesh. The fifth case was one in which the vomiting was not so frequent, but quite as persistent. In this case, in addition to the vomiting, the abdomen was quite tender—as I supposed, from the violent retching. The caustic in this case was applied twice before entire relief was obtained.

In all of these cases, before resorting to the caustic, I had faithfully tried, and for some time, remedies which are usually resorted to in such cases, without any benefit whatever in the fourth and fifth cases, and only temporary improvement in the others. These were all cases of first pregnancy, except the second one. In the first and second there was slight erosion of the mucous lining around the os; in the others none whatever, all three being perfectly healthy in appearance.

Dr. J. Marion Sims here adds notes of a case in his own practice, which we copy: "I am not in the way of seeing much of this affection, but a case came under my observation a few days ago, so strongly confirmatory of Dr. Jones' views, that I take the liberty of appending it to his paper:

Madame de C——, aged twenty-two, married at sixteen, was a very delicate child, but is now a tall, handsome woman, weighing 175 pounds. She has one child, four and a half years old, During her pregnancy she suffered from nausea for two months or more, but not enough to cause anxiety about herself, and she was safely delivered at the full term. She did not nurse the child, and conception occurred again a year after its birth. Nausea began with conception, and continued unabated for two months, when she miscarried. This was at Arcachon, in 1874. In 1875, she conceived again. Conception was immediately followed by nausea, which persisted in spite of the usual remedies,

and she miscarried again at the end of the second month. This was at Havre. In 1876, she miscarried a third time in New York, at the end of two months from the prostration of nausea, which began, as before, at the time of conception. She had the ablest counsel in New York—namely, Dr. William Jones, Dr. Thomas F. Cocke and Professor Barker. Her life was in great danger with each of these miscarriages; and the distinguished accoucheur, Professor Fordyce Barker, told her she would hardly survive another such trial as she had just passed through.

I saw Madame de C—— on October 24th, 1877. She gave me the history of her miscarriages, and said she feared she was pregnant again. She had just missed her period, and for the last ten days had felt such nausea and disgust for food that she was sure she was pregnant. I gave her some bismuth to take during the day, and some bromide of sodium at night. She returned on the 29th, complaining more than ever of nausea, and I prescribed oxalate of cerium. Four days after this Madame de C—— sent for me. She had been confined to her bed for four days, so nauseated that she could not get up, and could not take any nourishment whatever. She did not vomit, but she was completely prostrated by the constant nausea and starvation. She was so changed in appearance since I saw her that I thought there must be something more the matter with her than the mere nausea of pregnancy. Was it malarial? She had just moved into a new house. Her little boy had been complaining for several days, and her maid-servant had some malarial symptoms requiring quinine. Madame de C—— had lived in malarial regions in America, and she imagined herself worse on alternate days. Thinking there might be a malarial element in her case, I ventured to give her ten grains of quinine in two doses, which unfortunately produced vomiting and purging, and greatly augmented her prostration. She was now worse than ever. She had had no sleep for two or three nights, and was altogether in a most miserable plight. So I concluded to quiet both stomach and nervous system by bromides, and gave her 120 grains between 5 P. M. and 2 A, M. But she did not sleep, and and condition was now such as to alarm the family. They were evidently as much dissatisfied at my empirical treatment as I was myself. Beginning, at last, to look upon the case as one purely of nausea from pregnancy, I determined to try local treatment.

There was right lateral anteflexion. Both lips of the os tincæ were granular, and covered with a profuse glutinous leucorrhœal secretion. It was a case in which Dr. Graily Hewitt's pessary treatment might have been tried, or Dr. Copeman's plan of forcible dilatation of the os and cervix. The os had been consider-

ably lacerated bi-laterally during her labor. The anterior lip was everted as well as eroded, and the finger could easily have been carried into the canal. But having previously made up my mind to try Dr. Jones' method, I cleared away the leucorrhœal discharge, and applied a solution of the nitrate of silver (two drachms to one ounce) freely over the whole surface of the cervix till it was well whitened, and I stopped all other medication. On the next day, I found Madame de C—— sitting up in bed, and as bright and cheerful as possible. The change in her voice and general appearance was marvelous. She had had a good night's sleep, the first for a week. She had taken a liberal breakfast, the first good meal for a fortnight, and altogether she felt herself a new being compared with what she was the day before. A show of blood followed the application of the nitrate of silver, and she began to hope that it was a real menstruation. At the end of five or six days there was some nausea, but not at all distressing, and I pencilled the neck of the womb with pure carbolic acid till it was completely enveloped in a whitish film. On the next day she said she was perfectly well. On November 19th, she came to me, saying that family affairs called her to New York, and she wished to have the carbolic acid applied again as a precautionary measure. She had occasional nausea, but it amounted to nothing. It did not prevent her from sleeping, and did not prevent her from eating. She had never felt so well before during the first two months of any of her pregnancies.

If Dr. Jones' treatment acts as promptly in all other cases as it did in mine, the profession will certainly feel grateful to him for it."

Another Case of Arsenical Poisoning Successfully Treated by Dialyzed Iron.—Until the fact (suggested by theoretical considerations and based on experiments outside the stomach) is established that dialyzed iron is in reality a practical antidote for arsenical poisoning, or until the claims made by pharmacists and chemists for this particular virtue of dialyzed iron are disproved by clinical observation, the report of every case of arsenical poisoning treated by this preparation of iron should be given publicity. In our February number, we quoted a case from the Philadelphia *Medical Times* in which it did prove successful; and now we report the only other case that we are aware of in which dialyzed iron has been used as an antidote to arsenical poisoning.

James Hayes, M. D., C. M., Simcoe, Ontario, in the March number, 1878, of the *Canada Lancet*, says that during the

evening of November 14th, 1877, he was summoned to Mrs. B's char-woman who had accidentally taken arsenic. Mrs. B. had purchased some arsenious acid with which to destroy mice. During the morning of November 14th, she had spread at least a half teaspoonful of the poison upon a slice of buttered bread, and placed it on a shelf in the pantry. During her absence from home for a short time, the char-woman went into the pantry and, not being aware there was any poison upon the bread, ate the whole. She stated she thought it was rather gritty. On Mrs. B's return a few minutes after, the woman complained of being sick, with cramps in her stomach, and wished some ginger tea to relieve them. Mrs. B. went to the pantry for the ginger, when she found the poisoned bread gone. On asking the woman, Mrs. B. was horrified to learn that she had eaten it.

I administered an emetic and promoted vomiting by large draughts of warm water. After the stomach had been thoroughly emptied, I gave a tablespoonful of dialyzed iron, diluted with water, which was rejected in a few minutes. I then repeated it in thirty drop doses every twenty minutes for two hours, and afterwards at longer intervals. About two hours after my arrival, alarming symptoms of collapse showed themselves; the pulse became extinct at the wrist; the skin cold and clammy, etc.; but by giving brandy freely, with the application of hot bottles and friction, she began to revive, and went on gradually improving until, in about ten days, she appeared to be restored to her accustomed good health. The only unpleasant symptoms she complained of during her convalescence were weakness, thirst and a burning sensation in the stomach.

I attribute this woman's recovery entirely to the dialyzed iron. It appears almost incredible that recovery should have taken place, considering the amount of arsenious acid swallowed. There must have been fully half a teaspoonful of acid, which was lying in the stomach from half an hour to one hour before I saw her.

Plaster Jacket in Fractures of the Spine.—Prof J. T. Hodgen' M. D., of St. Louis, has recently treated two cases of fracture of the spine, with the plaster of Paris jacket—one in the dorsal, and the other in the lumbar region. The first without paralysis, but accompanied by fracture of the sternum; the last was a fracture of the third lumbar vertebra with displacement, deformity and paralysis. The fracture in the dorsal region was at the fifth or sixth dorsal, and there was no displacement. Although the circular turns of the plaster bandage cannot be made to reach sufficiently above the sixth dorsal vertebra to afford any

direct support to the vertebral column, it must be remembered that the ribs connect with the dorsal vertebræ, pass obliquely and downward and forward to join the sternum, and may be used to support the upper dorsal vertebra, so that by encasing the upper part of the pelvis the abdomen and the lower two-thirds of the chest in a plaster bandage, we may efficiently support the spine and secure the rest to the part so important to repair, without impairing the general health of the patient by confining him to bed. The case in which the fracture existed in the dorsal region, has progressed without an unfavorable symptom and is now well, after two months and a half; while in the other case, the lumbar fracture, the paralysis still remains, the urine must be drawn off. No bed sores have formed, and there is not the slightest improvement in the paralytic condition, though it is hoped the general health may be improved by allowing him to be carried about in the open air. At the present writing, three months after the occurrence of the accident, the case is not promising, though we certainly believe a plaster jacket has prevented the occurrence of bed sores.—*St. Louis Medical and Surgical Journal*, March, 1878.

Glycerine in the Treatment of Internal Hemorrhoids.—Dr. David Young, of Florence, in *The Practitioner*, January, 1878, reports five cases in which permanent benefit followed the internal administration of glycerine in from two to three drachm doses, in water, night and morning. These cases seem to show that we may be able to add glycerine to our list of palliatives for this troublesome malady. There are many patients who will not submit to surgical interference, and others—as, for example, consumptives in advanced stages of their disease—to whom one would scarcely recommend it, so that we are glad to welcome any means which would alleviate such a distressing condition. Not the least recommendation of this plan is, that it is both easy and pleasant, and probably also, especially in the case of phthisical patients, beneficial in some other respects. None of the patients to whom he has given it have experienced any difficulty in taking it, and, when the sweet taste is an objection, he usually orders a little lemon juice to be added to each dose.

Curara for Hydrophobia.—The properties of this poison preclude its medicinal use in any other form than that of a solution for hypodermic injection. The solution should be so prepared as to produce as little pain as possible when injected, having regard to the fact that rabies patients have an intensified dread of pain. To prepare a uniform solution of a drug so deadly and va-

rious as curara, one should always have recourse to the same parcel of which the strength has been proved. Curarine or one of its salts might be used; but independently of the grave risks incurred in preparing them, we are, as yet, without trustworthy data upon which to frame a formula.

The keeping powers of a solution of curara will depend, in a great measure, on the menstruum. Water produces a solution giving the minimum of pain when injected, and keeps well. The following formula is proposed by Mr. Moss as best meeting the requirements for a hypodermic injection: R. Curara, gr. j; water, minims, xij. Dissolve; let the solution stand forty-eight hours, and then filter. Using this solution, two-thirds, a half, a third or a quarter of a grain may be given in a whole number of minims. The accounts of the use of curara seem to indicate that the dose is from a quarter to half a grain.

Curara requires to be handled with the utmost care. It should not be allowed to come into contact with a fresh cut or scratch. Two good rules would be—never to use the powder in the dry condition, and never to touch it with the naked fingers.

Œnothera Biennis in Mucous Inflammations.—Œnothera biennes, or evening primrose, which is indigenous to nearly all parts of the United States, possesses valuable properties as a mild sedative and alterative in many diseased conditions of mucous surfaces, especially the gastric, intestinal, and vesical.

It is useful in some forms of dyspepsia, particularly those accompanied by an irritable state of of the stomach and of the bladder, as indicated by frequent vomiting and micturition. Having prescribed the remedy for eight years. I have been able to carefully note its effects, and am convinced it will be an important addition to our list of medicines.

Dr. N. S. Davis, of Chicago, has recently found valuable results from this remedy (*Quarterly Abstract of Medical Science*, February, 1877). He says: "From my own clinical observations I am inclined to regard it as a mild but efficient sedative to nervous sensibility, acting more especially on the pneumogastric nerve."

Its chief value, I believe, will be found in typhoid fever, to the treatment of which it is peculiarly adapted by its soothing action upon the intestinal mucous surface. I am convinced that it essentially modifies the inflammatory condition which precedes ulceration of Peyer's patches, and that its use may frequently prevent ulceration. The usual dose in typhoid fever is from fifteen to thirty drops every three hours. There is no danger of an overdose, and I have known a tablespoonful of the fluid extract

to be given every two hours, by mistake, till two ounces had been taken. In that case it seemed to revive the patient, after the manner of a stimulant, and I am not sure that it might not be advantageously given in large doses in some cases. The fluid extract of œnothera is not incompatible in mixtures with any other medicine. Its flavor resembles that of cold tea, and it is acceptable to any condition of the stomach. It appears to be well worthy the attention of the profession, and the writer would be pleased to learn the results of its use in the hands of other practitioners.—JAS. F. SULLIVAN, M. D., in *Pacific Med. and Surg. Journal.—Mich. Med. News*, March, 1878.

A Measure to Secure Timely Warning Against Cholera, Yellow Fever, &c.—We learn from the Washington *Evening Star*, of February 23d, 1878, that at the Quarantine Convention in progress during the past week at Jacksonville, Fla., in which the principal seaboard cities of the South were represented by their mayors, health-officers, or leading medical men, an important resolution was introduced by Mayor Tucker, of Norfolk, Va., and unanimously adopted, urging that the government co-operate in the proper enforcement of quarantine by requiring weekly reports to be transmitted by United States consular officers to the Surgeon-General of the Marine Hospital Service at Washington, stating the sanitary condition of their respective ports, particularly with the presence or absence of contagious or infectious disease, weekly abstracts of these reports to be furnished the sanitary authorities of every seaboard city and town; and by further requiring said officers to report immediately the departure from an infected port of any vessel bound to a port of the United States. This resolution is in accordance with the recommendations made by Surgeon-General Woodworth in his report relative to the cholera epidemic of 1873, published in 1875, and in a paper on the general subject of quarantine read before the International Medical Congress at Philadelphia in 1876. The action of the Convention, and the resolution of the Legislature of Kentucky presented in Congress by Mr. Beck, asking that the Committee on Commerce prepare a bill to render the quarantine system effective, indicate that this subject is now receiving general attention. The value of timely warning as an aid in preventing the introduction of yellow fever, cholera, etc., cannot well be over-estimated, and by the system suggested in the resolution of the Quarantine Convention at Jacksonville, Florida, it could be secured by already existing means at a trifling expense.

Book Notices, &c.

Transactions of the American Medical Asssociation, 1877, p. 694.

In our July number, 1877, having given a full report of the proceedings of this session, and synopses of most of the papers read, it is not necessary that we should occupy much more space just now. Besides, we have noticed in our February number two of the most interesting papers—one by Dr. Bowditch; the other by Dr. Cabell.

The favorable conclusions of Dr. A. B. Palmer regarding "Quinine in Acute Pneumonia" find support in the recorded experience of that careful observer, Professor Otis F. Manson, now of this city, who was among the very first in America to use the agent for the purpose named, and who, by his several publications, has, perhaps, done more than any other one writer to give special prominence to quinine in pneumonia. We do not, however, find any reference in Dr. Palmer's paper to any of the publications of Dr. Manson.

Dr. Charles Denison, in his admirable report of ten "Typical Cases of Phthisis, with Results," incidentally describes what he terms *stethoscopic percussion*, and which may prove of general service: "The bill of a Cammann's stethoscope is held in front of the open mouth of the patient (but not touching it), while the examiner, who is listening through the stethoscope, is practising forcible percussion over suspected portions. By practice, the hollow sound from an empty cavity, or a moist cracked-pot sound from one partly filled with secretions, is distinctly conveyed to the ear of the listener."

Dr. Henry A. Martin's "Report on Animal Vaccination" is exhaustive and of great practical value.

Dr. Benjamin Lee's paper on "Suspension as a Means of Treating Spinal Distortions" is of very striking interest at this time, when the general subject of treating spinal curvatures is exciting universal study. The illustrations are very useful to give at a glance a correct idea of his methods.

Dr. Lewis A. Sayre reports several cases of successful "Treatment of Fractured Ribs by Extension and Expansion of the Thorax, and Retention by Plaster-of-Paris Bandage." The first record was by Dr. S. B. St. John in the *American Journal of Medical Sciences*, July, 1872.

Address before the Rocky Mountain Medical Association, June 6, 1877. By J. M. Toner, M. D., President of the Association. Washington, D. C.: Published for the Association, 1877. Pp. 112.

The Rocky Mountain Medical Association is composed of the physicians who actually crossed the Rocky Mountains to attend the meeting of the American Medical Association in San Francisco, California, in May, 1871. The organization is entirely social and memorial in its character.

A lengthy extract from this address was kindly furnished us for publication in our August number, 1877. The address, as a whole, contains some observations on the geological age of the world, the appearance of animal life upon the globe, the antiquity of man, and the archæological remains of extinct races found on the American Continent, with views of the origin and practice of medicine among uncivilized races—more especially the North American Indians. It is the most readable paper of the kind that we have for years taken up. The author has a peculiar fitness—both by disposition and opportunities for this kind of valuable literature. Were this the only production of the kind from the pen of Dr. Toner, the reader of the book might attribute his pleasure to some leisure hours of the author. But this is only one of many such publications of Dr. Toner, while those who know him personally become convinced that these contributions are labors of love. His purpose is to search out the history of the medical science and profession, and to give it tangible and permanent record. Physicians will ever feel grateful to him for these constant manifestations of fraternal regard.

Higher Medical Education, the True Interest of the Public and of the Professsion. By Wm. Pepper, A. M., M. D. Pp. 46.

This is the address introductory to the one hundred and twelfth course of lectures in the Medical Department of the University of Pennsylvania, delivered October 1st, 1877, published by order of the Board of Trustees, and at the request of the medical class. A fair view of the present position of medical teaching in America is given; some of the chief defects and the causes thereof are pointed out. Dr. Pepper, in a most forcible and conclusive manner, shows the imperative demand of the times to be a higher grade of medical education. An appendix gives some valuable details of the systems of medical education in other countries, together with several statistical tables—all compiled from recent and reliable sources; many of these

details are, indeed, published for the first time in this country, and have been obtained by direct correspondence.

Mortuary Experience of the Mutual Life Insurance Company of New York, with Tabulated Reports, and an Analysis of the Causes of Death. By DRS. G. S. WINSTON, W. R. GILLETTE, E. J. MARSH. Vol. II. New York: 1877. Pp. 222.

The mechanical "get up" of this book is excellent. The type used is large; the paper excellent; and the binding, elegant. The composition—the work of the authors—shows the utmost care in compilation of figures and accuracy in calculation, and the conclusions are well drawn.

It is impossible to present a fair analysis in the space at our command of a work so filled with figures and calculations, each table bringing it sown suggestions. The Company has now completed the period of a generation (over thirty years) and its immense experience as to numbers of insured gives the work a special value in regard to vital statistics. This volume states the various causes of death; each cause is analyzed separately, and its results exhibited. Consumption is the disease of pre-eminent importance, as over twenty per cent. of all deaths have been occasioned thereby. "The effects of the presence or absence of hereditary family influences, and the physique and proportions of the consumptives, are ascertained and developed." Next in the order of frequency are typhoid fever and apoplexy.

The Annual Medical Directory of Regular Physicians in Illinois. F. A. EMMONS, M. D., Editor and Proprietor, Chicago, 1878.

This *Directory* has been prepared with a great deal of care, and is exceedingly serviceable to all having anything to do with the profession in Illinois. As an advertising medium, also, it is very valuable, as 5,000 copies are issued in January of each year, and is sent, not only to all the regular physicians of the State of Illinois, but also to many of those who reside in the great Northwest. The next issue will appear January, 1879, in which will appear a review of all the medical books issued during the current year; it will also contain memoranda from exchanges, making a complete epitome of medical news for the year.

Baths and their Uses in the Treatment of Diseases of the Skin. Pp. 26.

This is a valedictory address to the Class on Diseases of the Skin at the Philadelphia School of Anatomy and Surgery, de-

livered January 16th, 1878. by John V. Shoemaker, A. M., M. D., Physician to the Pennsylvania Free Dispensary for Diseases of the Skin, etc. It is historical in detail as well as clinical, and is both interesting and instructive.

Proceedings of the Association of Medical Officers of American Institutions for Idiotic and Feeble Minded Persons. Sessions 1876 and 1877. (Dr. H. B. Wilbur, Syracuse, New York, President; Dr. I. N. Kerlin, Media, Pennsylvania, Secretary. Pp. 35.)

This volume has among its papers one by Dr. E. Seguin, of New York, on a *typical case of sensorial idiocy;* another by Dr. Kerlin, on the *organization of establishments for the idiotic and imbecile classes;* another paper by Mrs. C. W. Brown, of Barre, Mass., on *prevention of mental disease;* another by Dr. H. B. Wilbur, on the *classification of idiocy.* These are all good papers. The next session will be in Syracuse in June, 1878.

Recognition and Management of the Gouty State in Diseases of the Skin. Reprint from *American Practitioner*, November, 1877. Pp. 25.

So-Called Eczema Marginatum, of Hebra, as Observed in America. Reprint from *Chicago Medical Journal and Examiner*, November, 1877. Pp. 28.

Are Eczema and Psoriasis Local Diseases of the Skin, or are they Manifestations of Constitutional Disorders? Reprint from *Transactions of the International Medical Congress*, 1876. Pp. 19.

The above three pamphlets are by L. Duncan Bulkley, A. M., M. D, Physician to the Skin Department, Demilt Dispensary, Editor of the *Archives of Dermatology*, etc. They are very useful papers to the general practitioner as well as the specialist. They are written in the usual impressive style of the distinguished author.

Reprints and Pamphlets Received:

Observations on the African Yaws (Frambœsia Rubeola, Pian, Epian, Syphilis, Æthiopica, Syphilis vel Lues Æthiopica, Syphilis Africana); *and on Leprosy* (Lepra Tuberculosa, Lepra Hæbræorum, Lepra Ægyptica, Lepra Leontina, Lepra Arabium) *in Insular and Continental America.* By Joseph Jones, M. D., Professor of Chemistry and Clinical Medicine, University of Louisiana, etc., New Orleans.

Compulsory Vaccination. The Establishment of a Uniform System of Vaccination for all Citizens and Inhabitants of the State of Louisiana by Legislative Enactment. By same author.

Ovariotomy by Enucleation. By JULIUS F. MINER, M. D., Buffalo, N. Y. Extracted from the Transactions of the International Medical Congress, 1876. Pp. 10.

A Case of Syphilitic Aphasia. By L. P. YANDELL, Jr., M. D., Louisville, Ky. Pp. 8.

First Annual Report of the Commissioner of Agriculture of the State of Virginia. DR. THOMAS POLLARD, Richmond, Va. Pp. 123. (This is a useful report to one who wishes to learn as to the health, etc., of sections or counties of the State.)

Clinical Lectures on Surgery. By J. H. POOLEY, M. D., Reprint from Ohio Medical and Surgical Journal, Columbus. Lecture I. Pp. 25.

Some Hints regarding Uterine Supporters. By CLIFTON E. WING, M. D., Boston. Pp. 7.

Character: a Sermon by REV. C. A. BARTOL, Boston, 1877.

New Intra-Uterine Pessary. Secured and Steadied in Position by Silver Suture. By V. H. TALIAFERRO, M. D., Atlanta, Ga. Pp. 6.

The Drunkard's Diseased Appetite; What is it? If Curable, How? By REV. J. WILLETT, Fort Hamilton, New York.

Treatment of Fracture of the Femur. By EDWARD BORCK, M. D., St. Louis, Mo. Pp. 7.

Notes on Hydrobromic Acid. By EDWARD R. SQUIBB, M. D., Brooklyn, N. Y. Pp. 11.

Bathing, Cupping, Electricity, Massage. By DAVID PRINCE, M. D., Jacksonville, Illinois. Pp. 15.

Dogma of Human Responsibility. More especially as it Relates to Inebriety. By REV. J. WILLETT, Superintendent of the Inebriates Home, Fort Hamilton, N. Y. Pp. 21.

Clinical Gynæcology. By W. H. WATHEN, M. D., Louisville, Ky. Pp. 13.

Colles' Fracture and Dr. Carr's Splint. By HENRY A. MARTIN, M. D., Boston, Mass. Pp. 7.

Medical Problems of the Day. The Annual Discourse before the Massachusetts Medical Society, June 3, 1874. By NATHAN ALLEN, M. D., Lowell, Mass. Pp. 92.

Defects of Hearing, etc. By A. W. CALHOUN, M. D., Atlanta, Ga. Pp. 12.

Influence of Alcohol. By WM. M. COMPTON, M. D., Superintendent of Mississippi State Lunatic Asylum, Jackson, Miss. Pp. 30. (A first-rate paper.)

The 14th Annual Report of the Board of State Charities of Massachusetts. Jan., 1878. Pp. 71. (From Dr. Nathan Allen, Lowell, Mass.)

And a number of other State documents, Asylum reports, College catalogues, Springs circulars, advertisements, etc., etc., for which we have no space to give more of detail.

Editorial.

Medical College of Virginia Commencement Exercises occurred March 1st in Mozart Hall, which was crowded. The following are the graduates in medicine:—M. Holmes Lewis, D. C. Dickenson, Kent Black, Donald McPhail, Meade C. Kemper, A. Carter Jones, George F. Glover, A. R. B. Hartsook, John B. Broaddus, Thomas Carroll, Samuel E. Pribble, of Virginia, and James R. Kincaid, of West Virginia—12. Graduates in Pharmacy:—Charles L. Henry and Charles M. Shields.

Dr. McCaw, the dean of the Faculty, stated that Mr. W. A. Carrington's examinations proved perfectly satisfactory, both in chemistry and materia medica, but, owing to a law which required an apprenticeship in a drugstore, he was not at liberty to give the certificate of distinction.

The award for the best essay on Antero-Posterior Spinal Curvature was made to Dr. Lewis, of Winchester, Va. Dr. Kemper, of Richmond, Va., received Dr. McGuire's prize for the best notes on his surgical lectures. We extract from the *Daily Dispatch*, of March 2d, the subjoined account of further exercises of the evening:

"Dr. Frank D. Cunningham stated that there was another prize to be given. He then proceeded, in a very happy speech, to present to Dr. Landon B. Edwards, a handsome silver pitcher as a testimonial from the graduating class of the high regard held for him as a gentleman and a physician, and as an evidence of the value placed by them upon his interesting and instructive lectures on "Medical Jurisprudence." Dr. Edwards responded briefly and pointedly to the unexpected but not undeserved compliment. Both the donor and the recipient were loudly cheered.

Rev. John E. Edwards, D. D., was then introduced, and delivered the valedictory address. The address was couched in the usual elegant, chaste, and entertaining style of the reverend gentleman. It was replete with humor and flashes of high-toned sentiment, yet was eminently practical, and full of good advice and instruction to the young men just about to enter upon life's

chequered career. The address was listened to with great interest and repeatedly cheered."

The spring and summer course of lectures commences March 12th. Students should enter early so as to attend all the lectures.

"The fame of the Medical College of Virginia is national. Its diploma is a passport with the first medical men and to the highest medical institutions in the land."

Experts need not Testify.—The Supreme Court of Indiana has "decided that a physician cannot be compelled to give expert testimony in a case of litigation without being first paid, if he demand it, a fee commensurate with the value of his testimony. This decision was the result of an appeal from the decision of a Court of Common Pleas, at Harrison, Indiana."

To Contributors.—The Index bound with this number will show that we have been remarkably successful in having so many able and eminent contibutors. Many of these writers have other articles in preparation for our columns, and other authors have promised contributions to the fifth volume. We are anixious to have contributions of *practical* articles from every quarter. We hope, therefore, that when friends from whom we have not heard have such papers on hand, or when they hear of such papers in the hands of their friends, they will induce parties to contribute their papers to the *Monthly*.

We are frequently in receipt of letters asking if we will publish such or such an article that is still in the hands of the author. We can never make any promises on this subject. Every article that we publish must be examined by us, and within two weeks after the receipt of the manuscript, we reply by letter whether or not we deem the article suited to our pages. We regret very much that we have had to decline so many papers kindly sent us; but in each instance we have acted conscientiously.

We must ask some of our contributors to leave off in their articles all such sentences as are intended merely to compliment the journal or the editor. All such sentences tend to draw attention from the subject in hand to a thing which is of no interest to the scientific practitioner who is in search of some information useful at the beside. We invariably pass our pen through all such sentences in manuscripts—sometimes the larger part of a paper intended for publication. We do not mean by this so to misrepresent ourselves as to imply that we are less sensitive to and appreciative of compliments than other men; but such publications, as a part of a scientific article, are impolitic—however serviceable they might be to the *Monthly* in extending its circulation, were the same sentences used in conversations with

brother practitioners, in social medical clubs, etc., instead of to the editor or in his journal.

Contributions should be in hand at least one month prior to the time of their expected publication.

If authors, *at the time of sending their manuscripts*, will furnish us with a postoffice list of twenty or twenty-five practitioners in the United States to whom they wish to send complimentary copies of the issue containing their articles, their orders will be cheerfully filled without extra expense. We cannot, however, promise to send a larger number of copies without charging for them.

As we have no connection with the printing-office, contracts for *reprints* can only be made on such terms as the printers will make.

Meetings of State Medical Societies.—The Medical Association of the State of Alabama will meet in Eufaula, Tuesday, April 9th, at 12 o'clock. The physicians of Eufaula will entertain all visiting physicians, and the railroads will carry at excursion rates. Dr. Benjamin H. Riggs, Selma, Ala., Secretary.

The State Medical Society of Arkansas will meet at Fort Smith, Tuesday, May 7th. Dr. R. G. Jennings, Little Rock, Ark., Secretary.

The Florida Medical Association will meet in Jacksonville, on Tuesday, April 16. Dr. Joseph Y. Porter, Key West, Fla., Secretary.

The Medical Association of Georgia will be held in Atlanta, April 17th. The usual preparatory arrangements are being made. Dr. James B. Baird, Atlanta, Ga., Secretary.

The Kentucky State Medical Society will convene at Frankfort, on Tuesday, April 2d, at 12 o'clock. Owing to the death of Dr. L. P. Yandell, the late President, the "President's Address" will be delivered by the Senior Vice-President, Dr. J. L. Dismukes. Dr. John H. Letcher, Henderson, Ky., Secretary.

The Medical Society of North Carolina will meet in Goldsboro, on Tuesday, May 14. Dr. L. Julian Picot, Murfreesboro, N. C., Secretary.

The South Carolina Medical Association will meet in Greenville, Tuesday, April 9th. Dr. Henry D. Fraser, Charleston, S. C., Secretary.

The Texas State Medical Society will meet in San Antonia, Tuesday, April 2d. Dr. W. A. East, Hallettsville, Texas, Secretary.

The Medical Society of the State of West Virginia will convene in Weston, on Wednesday, May 15th. Dr. M. F. Hullihen, Wheeling, W. Va., Secretary.

Our Fourth Volume—Closes with this issue, and with it the subscriptions of great many expire. We hope friends will be prompt in renewing. To insure the success of any journal enterprise, the strictest business principles must be applied. We thank friends for the favors they have shown in aiding in the extension of our subscription lists in all parts of the country.

Our fifth annual volume will begin with the April number. An entirely new font of type has been purchased by our printers especially for our journal, and we hope to be more prompt in issuing the journal during the first week of each month.

The April number will contain the long promised engraving and biographical sketch of the distinguished author and beloved physician, Dr. Robert Battey, of Rome, Ga. We have no special promises to make further than those we have made heretofore and have tried to fulfill. We shall continue to devote our best energies to issue a first-class practical medical journal.

Dr. Hyatt's Method.—A subscriber calls our attention to the note we made in our February number, and reminds us that the extract from Barnes' *Obstetrics* reads: "Rouget (1810) advised the introduction of a sheep's or pig's bladder *into* the uterus, and then *distending it*. Diday (1850) used a vulcanized *caoutchouc bladder in this way*." These italics are by our correspondent, who goes on to say "Why were these bladders put *into* the uterus, if the object was simply to dam up the blood into the uterine cavity? Why were they not used as the ordinary tampon, and placed, like the tampon, only in the vagina, or, like the tent, only in the cervix uteri, if the object was simply to dam the blood up in the uterine cavity? When these bladders were introduced *into* the womb *and distended*, was it not to all intents and purposes "*elastic pressure* applied to the mouths of the bleeding vessels?"

The point made by our eminent correspondent is undoubtedly well stated, and we thank him for correcting our error; and we are sure Dr. Hyatt feels alike willing to "render unto Cæsar the things that belong to Cæsar." We are glad the report of Dr. Woodley attracted this attention, as it appears to us that the recommendation is a good one, and may save some woman's life in the absence of ergot and the hypodermic syringe. The authorship is a smaller matter than the value of the recommendation itself.

Dr. T. Spencer Wells has resigned his conncetion with the Samaritan Hospital, London, to which he has given a world-wide name. In this hospital alone he has performed 408 ovariotomies, with 309 recoveries. Twenty-six of his last series of 29 cases, in 1877, recovered.

Dr. W. C. Dabney.—We cannot close this volume without making public our special thanks to Dr. W. C. Dabney, of Charlottesville, Va., for his excellent translations of well selected articles from our French and German exchanges. We regard ourselves as exceedingly fortunate in having the assistance of so worthy a physician, who has already won for himself a deserved eminence as the author of one of the Boylston prizes, and for original investigations of great practical value to the physiologist and physician. As a contributor to the pages of several medical journals, he is ever welcome.

Johns Hopkins Hospital.—The work of constructing this Hospital at the intersection of Broadway and East Monument Street, in Baltimore, which was stopped before Christmas, will soon be resumed. One of the great troubles has been in determining upon a plan for drainage and sewerage. Baltimore has no sewerage, properly so-called, and even for drainage of the Hospital grounds, it was found that the nearest point at which permission could be obtained from the city authorities to discharge the drainage into a public channel required the laying of a ten-inch tile pipe for a total distance of 1594 with a fall of 53 feet. The total amount of money thus far expended is $76,676.29.

The Clinical Thermometer, it may be supposed from an advertisement republished in a recent number of the *Canada Lancet* from the *Medical and Physical Journal*, of London, for January, 1800, was first used by Dr. Currie, who is also credited with being the first to use the cold-water treatment in fevers. His thermometer marked from 80° to 112° F. The instrument was about 5 inches long, and a quarter of an inch in diameter.

The Harvard Medical School during the past three years has cleared more than $25,000 over and above expenses. A reserve of over $22,000 has been laid aside for future contingencies. Hereafter the annual surplus will be applied to increase the moderate salaries of the professors. The examination system for admittance is working good. Of the thirteen candidates in June last for admission into the school, seven were admitted and six rejected. Harvard deserves the thanks and support of all regular physicians for the bold step it has taken to elevate the standard of graduation of medical men.

The Baltimore Academy of Medicine, organized of physicians who have been ten years in practice, at its second annual meeting, March 5th, elected the following officers for the ensuing term: Drs R. McSherry, President; J. Carey Thomas, Vice President; Chew Van Bibber, Treasurer; G. L. Taneyhill and E. T. Cordell, Secretaries; J. J. Chisolm, P. C. Williams and A. B. Arnold, Executive Committee.

Studies in Pathological Anatomy.—Francis Delafield, M. D., Adjunct Professor of Pathology and Practice of Medicine in the College of Physicians and Surgeons, New York, is preparing in monthly Parts a treatise on pathological anatomy. Each Part is a royal octavo, containing from two to five full-page lithographic plates in tint and in color, with accompanying explanatory text. The publication began with the February number, which, with the March number, has been received. If future Parts are issued with the same careful accuracy that characterize these two Parts, the completed volume will prove of the greatest practical value to every close student of medicine. Messrs. Wm. Wood & Co., New York, publishers. Subscription, $5 a year; single number 50 cents. Each Part is sent to subscribers, carefully rolled to protect the plates from injury.

The Rapidity of the Transmission of Nerve-Force, at the temperature of about 10° C., is between 20 and 30 metres a second, according to conclusions arrived at by Dr. Issac Ott, after some recent experiments published in the January number, 1878, of the *Journal of Nervous and Mental Diseases*. His other conclusion is that strong galvanic currents, causing extra-polar kat-electrotonus, as in the normal nerves, retard the movements of nerve force.

Medical Graduates, 1878:

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Bellevue Hospital Medical College, New York	130
Medical College of Ohio, Cincinnati	102
Hospital Medical College, Louisville, Ky	17
Louisville Medical College, Ky	70
Medical Department of University of Louisville, Ky	71
Buffalo Medical College, N. Y	43
Miami Medical College, Cincinnati	51
Total to date reported	653

Dr. Samuel F. Mudd.—Mr. Henkle, of Maryland, has introduced a bill authorizing Congress to pay $3,000 to Dr. Samuel F. Mudd, of Maryland, for professional services rendered the people of Fort Jefferson Fla., in 1867, during the yellow fever epidemic. Dr. Mudd was the physician who rendered professional services to Booth after the murder of President Lincoln, and his consequent sentence to the Dry Tortugas was remitted because of his gallant and self-sacrificing services to the victems of the fever. *The Baltimorean, March* 8, 1878.

Dr. Brown-Sequard, who is too well known to need an introduction to the American medical profession, is at present in this country to visit the larger cities and entertain his professional friends with his observations and researches in that most interesting, yet still more obscure field of medical science, the diseases of the brain. In the past month he paid a visit to our city, and under the auspices of the Chicago Medical Press Association, delivered three lectures on "Paralysis and convulsions as effects of diseases of the base of the brain."—*Chicago Med. Jour. and Exam.*, March, 1878.

Wadsworth's Uterine Elevator is an improved stem pessary, of good design, easy of introduction and wear, and very serviceable—especially in cases of procidentia uteri. Ordinary attention to cleansing the cup, and renewing it when the secretions act upon the material, so as to roughen it, will prevent the irritation of the cervix uteri, so often complained of after the use of some of the other "cups."

Thanks are returned to Dr. Fowler, of Youngstown, Ohio, for one of his pessaries, so highly recommended by Dr. Sims and others. Mr. George F. Lynn, of Canfield, O., is his general agent.

Also, to Messrs. William R. Warner & Co. for samples of parvules.

House for Opium Habitues.—We invite the attention of our readers to the announcement in this issue of Parrish Hall, the Medical Home for opium habitues, Brooklyn, N. Y. It offers an attractive home, with facilities for treatment that have been attended, we learn, with eminently gratifying results.

Obituary Record.

Dr. Walter P. Reese died of pneumonia at his residence in Selma, Ala., February 21st, 1878. He was 59 years of age, and a native of Alabama. He was a physician of great learning and ability, and was a consistent member of the Cumberland Presbyterian Church. He was a complete walking encyclopædia of medicine. The Selma Medical Society adopted the following resolutions presented by Dr. C. D. Parke:

Resolved, 1st. That in the loss of our brother, the Selma Medical Society deplores one who has ever come up to the full measure of that noble word, duty.

2d. His family, a devoted and loving husband and father; the community, a benefactor to whom it owes a deep debt of gratitude for his self-sacrificing and unselfish devotion to their health and comfort; and the church, a christian gentleman, who showed forth in his life those sterling virtues so beautifully illustrated in the every-day life of its great founder.

3d. That we offer to his family our sincere sympathy in their sore bereavement.

4th. That a page in our book of record, suitably inscribed, be set apart to his memory; that thess preamble and resolutions be spread upon the minutes, the secretary transmit a copy to his family, and they be published in the city papers.

Dr. S. M. Didama, died at his home in Syracuse, N. Y., March 7th, 1877. He was a young man of great promise in the profession, and his local influence for good will long be felt. He was a son of Dr. Henry Didama.

Dr. Fleetwood Churchill, the eminent gynæcologist, is dead. He was the Professor of Midwifery in the School of Physic, in the University of Dublin, and the author of a formerly very popular work on Midwifery.

Dr. Augustus H. Cenas, Emeritus Professor of Obstetrics and Diseases of Women and Children in Medical Department of the University of Louisiana, died January 10th. With the assistance of others, he was instrumental in founding the University of Louisiana in 1834.

Dr. Le Grand G. Capers, died at his home in Vicksburg, Miss., December 3d, 1877. He was "stricken down in the glorious noon of his manhood." Whether as a surgeon in the Confederate army, or as a teacher in the New Orleans School of Medicine, or in his intercourse with his professional brethren, he was ever the same high-toned, honorable gentleman, and eminently skilled in his profession.

Dr. Edward H. Clarke, one of the Editors of the *Journal of Nervous and Mental Diseases*, died November 30th, 1877, at his home in Boston, Mass.

Claude Bernard, the distinguished physiologist, is another of the illustrious men whose death we have to announce. It was he who discovered the glycogenic function of the liver. He was 65 years of age.

Dr. E. A. Semple, of Montgomery, Ala., died during November, 1877. We were pained at receiving this intelligence incidentally by a postal.

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(APRIL, 1877—MARCH, 1878 inclusive.)

Explanations.—The letters, V. T., preceding some of the figures, refer to the paging of the **Transactions of the Medical Society of Virginia, 1877,** (Part II of Volume II, the paging of which is explained on the page next to the title page of the *Transactions*). This second part of Volume II of the *Transactions* was issued with the January number. 1878; but in the completed fourth annual volume of the MONTHLY, should be bound immediately after the March number, 1878.

Notices of books, personals and advertisement notices, journals and deaths are indexed under the respective headings of **Book Notices, Personals, &c., Journalistic** and **Obituary Record.**

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